Contents

Getting Help on BIMcloud .......................................................... 7
Introduction to BIMcloud ......................................................... 8
    Key Features of BIMcloud .................................................. 9
    BIMcloud vs. BIMcloud Basic: Feature Differences .............. 14
Install Guide ................................................................. 15
    Compatibility ............................................................. 16
    Hardware/Software Requirements .................................. 17
    Clean Installation ...................................................... 18
    BIMcloud Delta Cache .................................................. 32
    Update Components to Current BIMcloud ....................... 35
    Reconfigure BIMcloud Components ................................. 40
    Redefine Snapshot Folder ............................................ 41
    BIMcloud Licensing ..................................................... 42
        The BIMcloud User License ......................................... 43
        Using the Hardware License Key ................................. 44
        Using a CodeMeter Server ......................................... 45
    Upgrade from BIMcloud Basic to BIMcloud ..................... 47
    Downgrade from BIMcloud to BIMcloud Basic .................... 48
    Uninstall BIMcloud ...................................................... 58
BIMcloud Manager ............................................................. 59
    Manager Web Interface ................................................ 60
        Home Screen ....................................................... 61
        Content Types ..................................................... 62
        Header ............................................................... 63
        Navigator ........................................................... 64
        Summary ........................................................... 69
        Panels ............................................................... 71
        Background Jobs .................................................... 72
        Settings Inheritance ............................................... 73
Projects Page ................................................................. 74
    Navigator ............................................................... 75
        Filters ............................................................. 76
        Expanded View .................................................... 77
    Functions ............................................................. 78
        Create Folder .......................................................... 80
        Project Status ..................................................... 81
        Duplicate Project, Library or Folder ......................... 83
Create or Duplicate a Tag .......................... 160
Remove Tag from Item .......................... 161
Edit/Delete Tag .................................. 162

BIMcloud Servers Page .......................... 163
Navigator ........................................... 164
Functions ......................................... 166
Create Folder ...................................... 167
Pair BIMcloud Server ............................ 168
Server Status (Running/Stop/Restart) ............ 171
Move to Server/Folder ............................ 172
Disconnect BIMcloud Server ...................... 173
Delete Folder ...................................... 174

Summary ............................................ 175
Panels .............................................. 177
Server Root ........................................ 178
Server Folder ...................................... 179
BIMcloud Manager Server ......................... 180
  BIMcloud Manager - LDAP Panel .................. 184
  BIMcloud Manager - Licenses Panel .............. 191
  BIMcloud Manager - Backups Panel ............... 193
BIMcloud Server .................................. 194
BIMcloud Server/BIMcloud Manager Backups ..... 198
  How to Schedule or Create a Server Backup .......... 199
  How to Restore a Backup for BIMcloud Server or Manager 201

Hosted Projects/Libraries ......................... 204
Access Panel ..................................... 207
  Access Panel View Modes ......................... 209
Granting Access .................................. 213
    Roles Available when Granting Access .............. 215
    Inheritance of Access Rights .................... 218
    Traversing .................................... 219
    Permissions and Dependence .................... 220
Users Without Access ............................ 221
Revoke Access .................................... 222
Permission Management: Simplified and Detailed ........ 224
Troubleshooting: Permissions Deadlock ............ 226

List of Permissions ............................... 227
  Management Related Permissions .................. 228
  ARCHICAD Related Permissions .................. 230
Activities Panel .................................. 234
Notifications ..................................... 237
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Notifications</td>
<td>242</td>
</tr>
<tr>
<td>Connection Settings</td>
<td>243</td>
</tr>
<tr>
<td>BIMcloud Tray Icon</td>
<td>247</td>
</tr>
<tr>
<td>Index</td>
<td>249</td>
</tr>
</tbody>
</table>
Getting Help on BIMcloud

Context-Sensitive Help

On any page of BIMcloud Manager, click the question mark at top right.

The Help will open to a description of the currently active content/panel.

PDF Guide

Click here to access the PDF version.

Additional Resources

See the BIMcloud-related Knowledge base articles at GRAPHISOFT’s online Help Center.
Introduction to BIMcloud

GRAPHISOFT BIMcloud responds to an industry need - allowing remote teams to work together and handle large files. It also allows working offline, and enables working from just about any location, so that team members can log in and work anywhere. Any project data that can be imported into ARCHICAD can be communicated via the GRAPHISOFT BIMcloud.

- When implementing BIM on a larger scale, architects often run into bottlenecks in model accessibility and workflow management. GRAPHISOFT’s BIMcloud is the industry’s pioneering solution for model-based team collaboration for companies who use Teamwork in ARCHICAD.

- The Delta Server™ technology reduces network traffic to a minimum for instant and reliable data-exchange, both within the office and over the Internet. In Teamwork, long waiting times for server synchronization are a thing of the past: team members can collaborate in real-time on BIM models through standard Internet connections from virtually anywhere in the world.

- The BIMcloud’s robust system architecture ensures the integrity of the BIM project at all times. Any data errors from malfunctioning components are blocked, preserving the project’s integrity on the network.

- The BIMcloud was designed for Architects, not for IT professionals - so it works in any standard office setup through any standard computer network.

- BIMcloud supports both online and offline work: if ARCHICAD loses the connection to the server, users can continue to work with their already reserved elements. Once the connection is re-established, they will be able to send their changes and receive changes submitted by other users.

- Built-in Teamwork Messaging boosts communication among users by putting the messages into context: simply select any element(s), write a comment and send it to another user for a review. A pop-up notification will inform the other user about the incoming message. After opening the message, he/she can zoom to the element and read the message in context.

- Roles allow an administrator, working in the browser-based Manager, to define different permission sets for Teamwork users and assign them based on their responsibilities. It is very easy to limit the functions available for a specific user to prevent accidental damage or unwanted modifications to the project. Each user can have different Roles for different projects - to fit their responsibilities in that particular project. Even a view-only role can be created, allowing people to Join the project without being able to modify anything.

- BIMcloud meets the needs of large international companies running multiple, complex projects. With its powerful features and sophisticated management tools, BIMcloud can disperse the projects along multiple BIMcloud Servers while using a single entry point for the whole system.

Topics in this chapter:

Key Features of BIMcloud

BIMcloud vs. BIMcloud Basic: Feature Differences
Key Features of BIMcloud

BIMcloud consists of:

– BIMcloud Manager: Management function of BIMcloud
– BIMcloud Server: Model handling component of BIMcloud. One or more BIMcloud Servers can be installed to the same or separate computers
– BIMcloud Delta Cache: Optional component which optimizes data transfer between ARCHICAD clients and a BIMcloud Server

Browser-Based Management

The BIMcloud Manager is a browser-based management interface that controls each aspect of the BIMcloud. This is a zero deployment tool in the hands of server managers: start a web browser on any computer, enter the address of the BIMcloud, and log in with his/her credentials. This solution does not even require a desktop computer or a laptop: any tablets or mobile phones with the Internet access can utilize this interface, on a screen display adjusted to the device’s parameters.

In addition to server managers, regular users can access this interface to review the status of their projects, access the project Activities list, and modify their personal parameters (e.g. password). Of course, they can access only those resources of the BIMcloud where they have adequate permissions.

Folder-based Project Organization

Note: Folder structure is limited to a single level in BIMcloud Basic.

The project management interface allows users to create folders for projects and servers.

Large firms with many projects must be able to organize them into a logical hierarchy. The folder logic is up to the company's strategy: set up folders based on studios, offices, project types, owners or architects. The folder organization even allows for setting up several completely different business units on the same BIMcloud. The visibility of these folders can be controlled based on responsibilities.

The folder organization is not limited to projects. Folder hierarchies enable managers to quickly and centrally modify backup strategies and access permissions, because lower-level folders and items in the folder hierarchy inherit these parameters from a higher level. Changing the backup settings for the folder immediately changes the backup settings for all the projects in that folder and all its sub-
folders. If for some reason a particular project requires unique backup settings, these can be easily customized without affecting the whole system inheritance.

**Note:** Inheritance is not available in **BIMcloud Basic**.

Folders can be also useful for organizing the BIMcloud Servers (for example, all BIMcloud Servers located in a particular office can be organized in a single folder). Their settings are inherited within the folder hierarchy, just as for projects.

### Standardized, Secure Communication

All BIMcloud components use the standard http (or https) protocol for communication. The http protocol is a common and accepted protocol in the IT industry; most (if not all) of any company’s network infrastructure is already capable of supporting it, and there is no need for further investments.

The https protocol is a trusted and secure communication channel used by all online banking systems and most online email applications. Utilizing the company’s existing certificates, ARCHICAD is able to communicate through this secure channel, enabling work on a BIMcloud from a remote location and preventing 3rd parties from accessing sensitive data.

### Multiple BIMcloud Servers

**Note:** Not available in **BIMcloud Basic**.

The BIMcloud is centrally managed through the BIMcloud Manager, whose browser-based interface provides central management of the BIMcloud Servers, BIMcloud Delta Caches and ARCHICAD clients.

- Allows multiple BIMcloud Servers to function within a single BIMcloud
- Keeps track of a project’s location
- Maintains a single, integrated list of users with their defined roles

For a Teamwork user, the new solution presents no difference in interaction: he/she joins or opens the desired Teamwork project as usual. The BIMcloud Manager automatically redirects to the correct project on the correct BIMcloud Server and ensures the automatic connection without any user interaction. If a server administrator shifts a project from one BIMcloud Server to another, the user can work without interruption, without needing to sign in to a different BIMcloud.

*See BIMcloud Servers Page.*
Streamlined User Management, User Groups

Note: Not available in BIMcloud Basic.

The BIMcloud integrates user management with the company's existing corporate user directory, using the worldwide standardized LDAP protocol.

A large company with many employees generally has a User Directory service. The BIMcloud - like other software (e.g. email server, intranet) - can connect to this User Directory, or even to several user directories simultaneously. User directory groups can be replicated on the BIMcloud Manager. Additional and/or ad-hoc user groups can be created if needed.

Users who log in to their office computers use the same login name and password to join a Teamwork project. This can greatly simplify the maintenance of the company user list. See BIMcloud Manager - LDAP Panel.

Detailed Management Permissions

Note: Not available in BIMcloud Basic.

The BIMcloud allows the fine-tuning of user permissions for all resources on the BIMcloud (e.g. users, roles, libraries...).

A large firm with far-flung offices may well have multiple users with different levels of server manager competencies. The BIMcloud allows you to configure this at a very detailed level. For example, each server manager has access only to the users he/she needs to manage. Similarly, a server manager's right to manage hardware functions (e.g. restart) can be limited to a particular server/module.
If subcontractors are also allowed to work on the BIMcloud, their access can be restricted to their particular project: they will not be able to see any other projects, users or settings of the BIMcloud. *See Access Panel.*

### Multi-Language Support

The language of the BIMcloud Manager interface can be changed on the fly from a language pop-up - located at the top-right corner of the interface.

Companies with multiple offices across multiple continents will probably use the local languages in each office. To avoid enforcing the language of the main office (where the BIMcloud Manager is hosted), users from the local offices logging in to the BIMcloud Manager can change their language to a preferred one. This change has no effect on anyone else in the company, or on the settings and modifications made on the BIMcloud Manager.
BIMcloud Delta Cache

*Note: Not available in BIMcloud Basic.*

If multiple ARCHICAD clients are working from the same location, while the project is hosted on a remote BIMcloud Server, the same data must be downloaded multiple times - once for each client. This redundancy increases server load and reduces available bandwidth.

The BIMcloud Delta Cache component optimizes data transfer between the ARCHICAD clients and a BIMcloud Server by caching the data on the client side. Once an ARCHICAD client downloads a part of the project, the data will be cached locally by the BIMcloud Delta Cache and offered to the next ARCHICAD client who requests the same data.

**Performance Improvements**

*Note: Not available in BIMcloud Basic.*

The BIMcloud Manager can connect to multiple distinct servers via a common interface. By adding these additional server computers, the manager can optimize server performance by load-balancing the projects manually among different computers, without affecting the work of the users.
# BIMcloud vs. BIMcloud Basic: Feature Differences

<table>
<thead>
<tr>
<th>Feature</th>
<th>BIMcloud Basic</th>
<th>BIMcloud</th>
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<tbody>
<tr>
<td>Teamwork from ARCHICAD</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Browser based Management</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>http/https Support</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Change Languages in BIMcloud Manager</td>
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<td>+</td>
</tr>
<tr>
<td>Keep Project Libraries next to Projects</td>
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<td>+</td>
</tr>
<tr>
<td>Store Project/Library Snapshots in any dedicated folder, by Server</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Reservation Assistant</td>
<td></td>
<td>+</td>
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<tr>
<td>Multiple BIMcloud Servers</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>LDAP Connection</td>
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</tr>
<tr>
<td>User Groups</td>
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<tr>
<td>Detailed Management Permissions</td>
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<td>+</td>
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<tr>
<td>Tags</td>
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<tr>
<td>BIMcloud Delta Cache</td>
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<tr>
<td>BIMx Messaging</td>
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<td>+</td>
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<tr>
<td>Automated Server Backups</td>
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<td>+</td>
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<tr>
<td>Resource Monitoring</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Support for Multiple ARCHICAD Versions</td>
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<td>+</td>
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</table>

This manual provides a note whenever there is a difference between the functions or the behavior of the two products. E.g.: “**Note:** Inheritance is not available in BIMcloud Basic.”
Install Guide

Use the BIMcloud Installer to install or update any or all of the following components as needed.

– BIMcloud Manager: Management function of BIMcloud
– BIMcloud Server: Model handling component of BIMcloud. One or more BIMcloud Servers can be installed to the same or separate computers
– BIMcloud Delta Cache: Optional component which optimizes data transfer between ARCHICAD clients and a BIMcloud Server

Download and start the Installer for BIMcloud. The wizard will take you through the necessary steps.

If you have no previously installed BIMcloud components on your computer, the Clean Installation process will begin.

If you do have previously installed, older-version BIMcloud components, the installer will automatically identify and list the components for which an update is available. You can then run the update(s) straight from the installer.

All steps are described in the following sections:

Compatibility
Hardware/Software Requirements
Clean Installation
BIMcloud Delta Cache
Update Components to Current BIMcloud
Reconfigure BIMcloud Components
BIMcloud Licensing
Upgrade from BIMcloud Basic to BIMcloud
Downgrade from BIMcloud to BIMcloud Basic
Uninstall BIMcloud
Compatibility

**BIMcloud Manager**

Summary: BIMcloud Manager supports all earlier ARCHICAD and BIMcloud Server versions (starting with version 18).

<table>
<thead>
<tr>
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<th>BIMcloud Manager</th>
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<tr>
<td>ARCHICAD 18</td>
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<tr>
<td>ARCHICAD 19</td>
<td>+</td>
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<tr>
<td>ARCHICAD 20</td>
<td>+</td>
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<tr>
<td>ARCHICAD 21</td>
<td>+</td>
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<tr>
<td>ARCHICAD 22</td>
<td>+</td>
</tr>
<tr>
<td>BIMcloud Server 18</td>
<td>+</td>
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<tr>
<td>BIMcloud Server 19</td>
<td>+</td>
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<tr>
<td>BIMcloud Server 20</td>
<td>+</td>
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<tr>
<td>BIMcloud Server 21</td>
<td>+</td>
</tr>
<tr>
<td>BIMcloud Server 2018 and up</td>
<td>+</td>
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</tbody>
</table>

However, if you have any version 18 components installed on your computer, you cannot run any updates.

See Note on Version 18 Components.

**BIMcloud Server 2018 and up**

- BIMcloud Server is compatible with ARCHICAD 19 and up (after the required update is installed).
- If you wish to work on ARCHICAD 18 projects as well, you can install and pair BIMcloud Server 18 to your BIMcloud.

<table>
<thead>
<tr>
<th></th>
<th>BIMcloud Server 18</th>
<th>BIMcloud Server 2018 and up</th>
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<tbody>
<tr>
<td>ARCHICAD 18</td>
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<td>-</td>
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<tr>
<td>ARCHICAD 19</td>
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<td>ARCHICAD 20</td>
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<td>ARCHICAD 21</td>
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<td>ARCHICAD 22</td>
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<tr>
<td>ARCHICAD 23</td>
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</table>

See Pair BIMcloud Server.

Note: Make sure you have installed the latest update for your ARCHICAD version!
Hardware/Software Requirements

Hardware/Software requirements are modified from time to time. For up to date information on system requirements, please consult the following link:
http://www.graphisoft.com/support/system_requirements

Related Topics:
BIMcloud Licensing
Upgrade from BIMcloud Basic to BIMcloud
Clean Installation

If no BIMcloud components exist on your computer, then the BIMcloud Installer will take you through the following “clean installation” process.

1. Start BIMcloud Installer, then click Next.

2. Choose Install new BIMcloud. This installs two components, one after the other:
   - BIMcloud Server
   - BIMcloud Manager
3. Accept the license agreement. To see the full text in a browser, click Open in Browser.

4. Choose the installation location for BIMcloud Server.
5. A summary panel shows you where BIMcloud Server will now be installed. Click **Install** to start the process.

![Summary Panel](image)

For Mac users:

- If you are installing BIMcloud on a Mac OS 10.15 system, you must choose a location that is in or underneath the Applications folder.
- If you are installing BIMcloud on a Mac OS 10.15 system, you must grant Full Disk Access for BIMcloud. The BIMcloud Full Disk Access Tool appears automatically to guide you through the steps.

*See this Help Center article for details.*

6. When the installation is complete, the following panel appears:

![Success Panel](image)

Click **Configure** to continue.
BIMcloud Server Configuration

1. Define basic Server settings on the first page of the Configurator:

- **Port**: Select a free port or use the “Find an available port” command to automatically find one.
- **Data Folders**: Enter or Browse the location of the default Data Folders for Projects, Libraries and Cache.
  - Teamwork **Projects** and **libraries** on this BIMcloud Server will be stored in these folders
  - The default **Cache** folder stores temporary Teamwork data, which is used to speed up Teamwork processes.

2. Click Next to open BIMcloud Only Settings - BIMcloud Server.
Settings on this page require a BIMcloud User License. Do not set these options if you plan to use BIMcloud Basic; the settings here will have no effect, and may cause anomalies.

**Enable BIMcloud Server Backup**

Check this box if you plan to create backups of BIMcloud Server data. After checking the box, you must enter (or browse for) the path of the backup folder location.

**Notes:**
- To set up a Backup schedule, use the BIMcloud Manager (Servers page, Backups panel). See [BIMcloud Server/BIMcloud Manager Backups](#).

**Save Snapshots to External Folder**

By default, Project and Library snapshot files are saved to the folder where you installed the BIMcloud Server, with an .archive extension.  

*See Snapshot Files Location*

You can optionally choose a different folder: check this box, then browse for a folder path. BIMcloud will henceforth save Snapshots to this folder, in three automatically created sub-folders:

- PLN Snapshot
- BIM Project Snapshot
- Library Snapshot

*You can later redefine this folder path. See Redefine Snapshot Folder.*

3. Click **Start**, to launch the newly installed BIMcloud Server. Wait for the next step...
4. The Installer Welcome screen appears for the next process: Install BIMcloud Manager.

5. Choose a default language. This is the language used by the BIMcloud Manager’s browser-based interface. You can later switch languages from BIMcloud Manager, if needed.
6. Accept the license agreement. To see the full text in a browser, click Open in Browser.

7. Choose the installation location for BIMcloud Manager.
8. A summary panel shows you where BIMcloud Manager will now be installed. Click **Install** to start the process.

For Mac users:
- If you are installing BIMcloud on a Mac OS 10.15 system, you must choose a location that is in or underneath the Applications folder.
- If you are installing BIMcloud on a Mac OS 10.15 system, you must grant Full Disk Access for BIMcloud. The BIMcloud Full Disk Access Tool appears automatically to guide you through the steps. 

See this [Help Center article for details](#).

9. When the installation is complete, the following panel appears:

Click **Configure** to continue.
BIMcloud Manager Configuration

1. Define basic BIMcloud Manager settings on the first page of the Configurator:

- **Display Name**: By default, the BIMcloud will use the name of your computer. All server pop-ups will identify the BIMcloud by this name.

- **Port**: Select a free port, or use the Pick free port command to automatically find one.

- **Master Administrator password**: Create a secure password for the Master Administrator (masteradmin) user. This Master Administrator will always be able to log in with full access to all hosted data. In case you forget the password, you must reconfigure your BIMcloud and enter a new password.

- **Data folder**: This is the BIMcloud Manager's data storage folder.

  **Note**: Projects will be stored in a different folder - as defined on the first page of the BIMcloud Server configuration wizard.
2. Click **Next** to open BIMcloud Only Settings - BIMcloud Manager.

Settings on this page require a BIMcloud User License. Do not set these options if you plan to use BIMcloud Basic; the settings here will have no effect, and may cause anomalies.

- **Enable BIMcloud Manager Backup:**
  
  Check this box if you plan to create backups of BIMcloud Manager data. After checking the box, you must enter (or browse for) the path of the backup folder location.
  
  **Note:** To set up a Backup schedule, use the BIMcloud Manager (Servers page, Backups panel). See *BIMcloud Server/BIMcloud Manager Backups*.

3. Click **Start**. Configuration proceeds, until you see the following notice:
4. Click OK.

The next Configuration steps take place in a browser. (If your browser does not open automatically, then use the following URL: [http://localhost:PORT](http://localhost:PORT), where PORT is the port you entered on this Configuration page.)

**Continue the Configuration in a Browser**

![Configuration page](image)

Click **Start**.

**Log in as Master Administrator**

Enter the Master Administrator password to Log in to the BIMcloud Manager.
Create First User

Enter data for the first user. This user will be the first Server Administrator on the BIMcloud Manager. Fill in all the fields:

![Create First User form](image)

Select Product Plan

Choose the BIMcloud product to use: the full BIMcloud, or BIMcloud Basic.
- The full BIMcloud, with all features, requires a BIMcloud User License.
- BIMcloud Basic requires no license, but has limited functionality.

Regardless of the one you choose here, you can still upgrade or downgrade later, from the BIMcloud Manager’s Servers page.

For the difference between the two products, see [BIMcloud vs. BIMcloud Basic: Feature Differences](#).

If you have selected BIMcloud Basic, use the dropdown list to select a single ARCHICAD version (starting with AC 19) to use with BIMcloud Basic. (BIMcloud Basic can support projects from only one ARCHICAD version.)
Set up Server Address

This address will uniquely identify your server, even if ARCHICAD is using a different address to connect.

See details at Connection Settings.

To use one of the server’s current addresses, click Show current addresses and pick the desired one.

If you already set up the server’s address, you can enter it directly in the address field.

Keep in mind that if you use Dynamic IP Addresses at your office, then this address can easily change day by day. It is recommended to use a fixed IP address, a computer name, or a fully qualified domain name as the primary address.

You can change this address later, on the BIMcloud Manager’s Settings panel.

Set Up Mail Server

Use these fields to define the mail which will send information by email from the BIMcloud to the users. The mail server definition can be modified later in the browser-based BIMcloud Manager interface.

**Note:** Using a mail server is optional. You can click Skip this Step. However, if you don’t define a mail server here, you won’t be able to send emails (e.g. password reminders) to users from the BIMcloud.

Click Continue to finalize configuration.

If a BIMcloud Server is already installed on the computer, then the install process will automatically pair the new BIMcloud Manager with the existing BIMcloud Server.

If the computer does not have a BIMcloud Server installed, then you will have to manually pair the BIMcloud Manager and the BIMcloud Server.

See Pair BIMcloud Server.
Configuration Complete

It is recommended to log out now as the Master Administrator, and then log in with the user you created in the Create First User step (above). It is not recommended to use the Master Administrator account for everyday tasks.

Open BIMcloud Manager

You can open the BIMcloud Manager web interface from any computer which has network access to the BIMcloud. Do one of the following:

- Navigate to the same URL in your browser as you use in ARCHICAD
- From the BIMcloud tray application, click on BIMcloud Manager, then Open BIMcloud Manager command from the context menu
- From an ARCHICAD Teamwork project, use Teamwork > Project > Open BIMcloud Manager

The initial server administrator signs on as the Master Administrator (masteradmin), and has full access to all controls. He/she then proceeds to add users and assigns them roles and permissions as appropriate.

The first time you open a newly installed BIMcloud Manager, you must activate it free of charge, using your GRAPHISOFT ID.
BIMcloud Delta Cache

Note: Not available in BIMcloud Basic.

The BIMcloud Delta Cache component optimizes data transfer between the ARCHICAD clients and a BIMcloud Server by caching the data on the client side. Once an ARCHICAD client downloads a part of the project, the data will be cached locally by the BIMcloud Delta Cache and offered to the next ARCHICAD client who requests the same data.

Install Delta Cache

1. Launch the BIMcloud Installer wizard.
2. If you already have BIMcloud components installed: choose Install new BIMcloud or BIMcloud component. If this is a clean install, see the next step.
3. Choose Install single component, then click Next.

5. Continue and complete installation.

For Mac users:

- If you are installing BIMcloud on a Mac OS 10.15 system, you must choose a location that is in or underneath the Applications folder.
- If you are installing BIMcloud on a Mac OS 10.15 system, you must grant Full Disk Access for BIMcloud. The BIMcloud Full Disk Access Tool appears automatically to guide you through the steps.

See this Help Center article for details.

Configure BIMcloud Delta Cache

BIMcloud Delta Cache configuration takes place after you install a new BIMcloud Delta Cache.

Enter the following parameters:

- **Port**: Select a free port or use the “Pick free port” command to automatically find one.
• **Cache folder**: The BIMcloud Delta Cache will store temporarily cached data in this folder. Enter its path or click Browse.

• **Maximum Cache Size**: Enter the maximum size for the cached data. The more space you allocate, the more effectively the BIMcloud Delta Cache will operate.

Click **Start**.

To start using the BIMcloud Delta Cache, enter its address in ARCHICAD (**Options > Work Environment > Network and Update**).
Update Components to Current BIMcloud

If you have existing, earlier-version BIMcloud components on your computer, it is recommended that you update all components to the latest version. This ensures access to the latest BIMcloud features and fixes.

When you start BIMcloud Installer, the program automatically checks your computer for any existing BIMcloud components, and lists the components for which an update is available. You can then run the update(s) straight from the installer.

The update process keeps all existing data and configuration intact on the server (users, roles, projects, permissions.)

**Updatable Components**

**Update Process**

**How to Identify BIMcloud Components**

**Note on Updating BIMcloud Components on MacOS**

**Note on Updating BIM Server (from version 19 and later)**

**Note on Version 18 Components**

**Updatable Components**

BIMcloud can update the following earlier-version components installed on your computer:

- **BIMcloud Manager** versions 19 and up
- **BIMcloud Server** versions 19 and up
- **BIM Server** versions 19 and up

**Note:** As long as you have any components from version 18 installed, no updates are possible at all. See **Note on Version 18 Components**.
Update Process

1. Start the BIMcloud Installer.

2. Existing components have been detected. It is recommended to update them. Click **Update existing component**.

3. The updatable components are listed in the popup. Choose one to update (e.g. BIMcloud Manager).

   ![Update existing component](image)

   Click **Next**.
4. The component is updated. The older version is removed, and the latest version is installed in its place.

Click Finish.

5. Run the installer again to update any additional components in the list (e.g. BIMcloud Server). See also How to Identify BIMcloud Components.

6. Once all possible BIMcloud components have been updated, the installer no longer offers the update option.

For details on recommended workflows, see: http://helpcenter.graphisoft.com/technotes/bimcloud-and-bim-server/multi-version-server-technology/

How to Identify BIMcloud Components

You may have multiple BIMcloud Servers and (as of v2018) multiple BIMcloud Managers installed, which can result in a long list of updatable components when you run the installer.

- Earlier version components are identified by version number. (e.g. BIMcloud Manager 21, BIM Server 19)
• As of v2018, BIMcloud components are identified by the name of their installation folder, which includes the date of installation. This folder name is automatic and cannot be changed.

You can see your installed BIMcloud components by name in the following places:

• on the Status page of BIMcloud Manager (Servers page)

![BIMcloud Manager Status Page]

• on the BIMcloud Tray icon

See also BIMcloud Tray Icon.

Note on Updating BIMcloud Components on MacOS

For Mac users: If you are using BIMcloud on a Mac OS 10.15 system, you can only update BIMcloud components that have been installed in or underneath the system Applications folder.

If the BIMcloud component being updated is located somewhere else, it cannot be updated. You should create a backup of your data, then restore this data into a new BIMcloud installation.

See this Help Center article for details.

Note on Updating BIM Server (from version 19 and later)

BIM Server has been discontinued. You can update your BIM Server from versions 19 and up, as described above.

In this case, the updatable component is initially listed as BIM Server (e.g. BIM Server 19).

Since the BIM Server consists of two separate components (Manager and Server), you must do two updates: one for each of the two BIM Server components.

For example, if you have BIM Server 21 on your computer:

– first run the update on the BIM Server 21 - this is the Manager component;
– then run the installer again. The updatable list now shows the BIMcloud Server 21 item - this is the Server component. Run the update on this component too.
Note on Version 18 Components

Version 18 components cannot be updated. Projects from BIMcloud Server 18 cannot be moved to BIMcloud Server v2018 (or later).

If any version 18 BIMcloud or BIM Server component is found on your computer, no updates are possible for any component (from versions 18-21). You must quit the installer, remove the version 18 component(s), then start the installer again in order to find updatable components.
Reconfigure BIMcloud Components

To re-configure a BIMcloud component, locate the BIMcloud tray icon. Right-click, then find the component you need and click **Configure** from the available commands.

**Related Topics**

- BIMcloud Server Configuration
- BIMcloud Manager Configuration
Redefine Snapshot Folder

When you install BIMcloud, the BIMcloud Server Configurator settings define the location of your Project/Library Snapshots. If needed, you can later redefine the Snapshots folder path.

1. From the BIMcloud Monitor tray icon, open the Configuration dialog for the BIMcloud Server.
2. The Configure dialog opens. Go to the BIMcloud Only page.
3. At Save Snapshots to External Folder, do one of the following:
   – Check the box and/or redefine the existing folder path
   – Uncheck the box: Snapshots will now be saved to their default location
4. You are prompted to click Restart.

At this point, you can decide whether to keep your existing Snapshots (by moving them to the new location), or else delete them.

Keep and Move Snapshots: Check this to move the existing Snapshots to the new folder you have just defined.

If you leave the box unchecked, any existing snapshots in the old location will be deleted.

Related Topics

BIMcloud Server Configuration
Snapshot Files Location
BIMcloud Licensing

Topics in this section:

The BIMcloud User License
Using the Hardware License Key
Using a CodeMeter Server
The BIMcloud User License

Note: Not relevant for BIMcloud Basic, for which User License is not required.
Each user joining a project on the BIMcloud requires a BIMcloud User License.
The BIMcloud Manager component handles all license management tasks centrally. (Of course, ARCHICADs still need access to the ARCHICAD protection keys.)

Automatically Reserved License
When a user opens a Teamwork project in ARCHICAD, he/she gets an automatically reserved BIMcloud User License, provided there are enough licenses available.
This reserved User License allows the user to join any number of projects on the same BIMcloud from ARCHICAD and/or BIMx. (If the user joins a project from both applications, then a single BIMcloud User License is sufficient; no additional license is required.)
If a user works on multiple projects that are located on more than one BIMcloud, then each BIMcloud will automatically reserve an additional license for that user.
A BIMcloud User License remains automatically reserved until the user closes ARCHICAD, or goes offline for any reason.
Once he/she joins again: If there are no more available BIMcloud User Licenses, then the user can only work offline.

Assign License Manually
It is possible to manually Assign a BIMcloud User License to a particular user. A manually assigned BIMcloud User License remains permanently assigned to the user even after he/she closes all projects on the BIMcloud or goes offline.
An Administrator can Revoke a manually assigned license for any user, in BIMcloud Manager (either the Users page - Licenses Panel, or the Servers page - BIMcloud Manager - Settings Panel). If available, an automatic license is then reserved for this user.

BIMcloud Manager - Licenses Panel
User Settings

Information on Available Licenses
To view detailed information about the currently available/used licenses, open the BIMcloud Manager and navigate to the Servers > BIMcloud Manager > Licenses panel. (The BIMcloud Manager can be used without reserving a license.)
Using the Hardware License Key

After installing BIMcloud Manager, you should restart your computer before setting up the protection key. The hardware key must be accessible by the BIMcloud Manager. To ensure this, use one of the following methods:

- Connect the key to the BIMcloud Manager computer's USB port.
- Connect the key to a different computer and install a CodeMeter Server on it, which will provide access to the license for the BIMcloud Manager computer.

Notes:
- This CodeMeter Server can be the same one already used by the other GRAPHISOFT products in the office.
- Whenever CodeMeter is updated on your computer, you must restart BIMcloud Manager and BIMcloud Server. Failure to do so may affect backup/snapshot creation.

Programming the Hardware License Key

CodeMeter hardware protection keys for GRAPHISOFT BIMcloud Solution can be remotely programmed via http://www.graphisoft.com/downloads/licensing.

If you have recently purchased the GRAPHISOFT BIMcloud Solution, you will receive an empty CodeMeter key that you must “load” through the licensing site.

Related Topic:

Using a CodeMeter Server
Using a CodeMeter Server

System Requirements for a CodeMeter Server

The CodeMeter server is part of the CodeMeter driver, so you only need to select a computer on your network that will act as a CodeMeter server. To set up a CodeMeter server as a network license server, you will need the following:

- A computer with network connection (should be running during work hours).
- The computer must have at least three free USB ports.
- CodeMeter driver must be installed.

**Note:** There is no need for a server-level operating system for the CodeMeter server. You can use one of the workstations as a CodeMeter server; you must keep it running during work hours.

Set Up the Server

After you have your server running and the CodeMeter driver is installed, start the server as described below:

All CodeMeter settings can be managed in CodeMeter WebAdmin. To start it: Open CodeMeter Center (from Applications or using the Start menu) and click on WebAdmin or simply open localhost:22350 on your browser.

To enable the CodeMeter server:

1. Go to Configuration/Network tab.
2. Check Run Network Server checkbox.
3. Do not forget to Apply the changes.

From that point, the server runs and shares licenses on the local network.

**Important Note:** Whenever CodeMeter is updated on your computer, you must restart BIMcloud Manager and BIMcloud Server. Failure to do so may affect backup/snapshot creation.

Client Side Settings

All clients on the local network should find the server automatically. In case this does not work (e.g. your server is in a different subnet, or you are connecting remotely through the Internet), then you may need to specify the server's hostname IP address. On the client:

1. Open WebAdmin.
2. Configuration/Network.
3. Add the server to the Server Search List.

This field can have multiple entries; the client searches for available licenses in the specified order and only on the specified servers. Only when the list is empty does the client search for other available servers.
Access Control

With the default settings, all computers on the same local network (same subnet) can use a license from the server.

To restrict access:

- Open WebAdmin.
- Go to Configuration/Access Control.

If the Clients' list is empty, anyone on the local network can use a license. If at least one entry is listed here, only the listed entries can request a license.

**Note:** If the server is public on the Internet, or no one is allowed to use a license, make sure that this list is filled out correctly to avoid unwanted license usage.

You may want to check who is using a license:

1. Open WebAdmin on the server computer.
2. Go to Server/User tab.

Here you can see a list of active clients and clients who have borrowed licenses.

**Related Topic:**

*Using the Hardware License Key*
Upgrade from BIMcloud Basic to BIMcloud

Note: To use this option, you must log in as Master Administrator.

Follow these steps to upgrade your BIMcloud Basic to BIMcloud.

1. Go to the Servers page of BIMcloud Manager.
2. From BIMcloud Basic Manager, open the Licenses page.
3. Click Start Upgrade.
Downgrade from BIMcloud to BIMcloud Basic

**Note:** To complete this process, you must log in as **Master Administrator**.

Follow these steps to downgrade the full BIMcloud to the BIMcloud Basic version.

1. Log in as Master Administrator.
2. Alert all users who are connected to the BIMcloud that they must save their work. Access to the server will be locked during the downgrade process!
3. Go to the Servers page of BIMcloud Manager.
4. Select the BIMcloud Manager Server.
5. Open the Licenses page.
6. Click **Downgrade**.

As part of the downgrade process, you must reconfigure certain Manager definitions, because downgrading involves the loss of certain features.

**Using the Downgrade Wizard**

- The Downgrade Wizard appears at the edge of your screen, prompting you to complete each step.
- For the current step, click **Check**.
- If this step applies to you, it will be shown with a red warning triangle, and you are automatically taken to the right page of BIMcloud Manager, where you can adjust the settings as directed.
• When you complete the step, click **Check** again. If everything is OK, the red warning changes to a checkmark, and you can move to the next applicable step.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eliminate Sub-Folders</strong></td>
<td>In this step, eliminate the sub-folders (if any) in the Project Root. In BIMcloud Basic, you can have only one level of folders: you cannot add a sub-folder inside another folder.</td>
</tr>
<tr>
<td><strong>Disconnect BIMcloud Servers</strong></td>
<td>In this step, disconnect the unneeded BIMcloud Servers.</td>
</tr>
<tr>
<td><strong>Move BIMcloud Server</strong></td>
<td>Move your remaining BIMcloud Server to the Server Root.</td>
</tr>
</tbody>
</table>

• If a certain step is not applicable (e.g. you have no subfolders that need removing), it is grey.

• To abort the Downgrade process, click **X** in the progress bar at the top of the Wizard.
**STEP 1: Create Backups**

Make sure you have backups of your BIMcloud Manager and BIMcloud Servers. If you abort the downgrade process before completing it, you must use these backups to restore the original state of the BIMcloud.

**STEP 2: Lock Version**

BIMcloud Basic can support only one version of ARCHICAD. Once you choose your preferred ARCHICAD version, your BIMcloud Basic will be able to host only Teamwork projects that were created in that version. For example, if you lock to version 22, then your BIMcloud Basic can host only ARCHICAD 22 projects.

1. Go to BIMcloud Manager > Settings > Status. (Or click **Check** in the Downgrade wizard to take you there.)

2. At **Supported project version**: Choose the single ARCHICAD version to support (e.g. ARCHICAD 22).

**STEP 3: Delete Incompatible Projects**

In the previous step, you locked BIMcloud Basic to a particular ARCHICAD version. Now you must delete all incompatible projects from BIMcloud Manager - that is, all projects from other ARCHICAD versions:

1. Go to the Projects page of BIMcloud Manager. (Or click **Check** in the Downgrade wizard to take you there.)

2. Select the Project(s) to delete.
3. Click **Delete**.

**STEP 4: Move Projects**

BIMcloud Basic supports only one level of folders in the Projects Root.

If your Projects are located in lower-level sub-folders, you must move them now:

1. Go to the Projects page of BIMcloud Manager.
2. Select any Project(s) that are located in sub-folders. (Or click **Check** in the Downgrade wizard to take you there.)
3. Click **Move**, then select a target folder: either the Projects Root, or else another folder that is one level below.
**STEP 5: Move Libraries**

In BIMcloud Basic, Libraries can be located only in the default Libraries folder. If you have Libraries in other folders, you must move them now to the default Libraries location.

1. Go to the Projects page of BIMcloud Manager. (Or click **Check** in the Downgrade wizard to take you there.)
2. Select any Library located in a non-default location.
3. Click **Move**, then select the default Libraries folder.

**STEP 6: Eliminate Sub-Folders**

BIMcloud Basic supports only one level of folders in the Projects Root. If your Projects page contains any sub-folders, you must delete them now:

*Note:* These sub-folders are now empty: in the previous steps, you moved any projects or libraries they had contained.

1. Go to the Projects page of BIMcloud Manager. (Or click **Check** in the Downgrade wizard to take you there.)
2. Select any sub-folders.
3. Click **Delete**.
STEP 7: Delete All Tags
Tags and the My Tags page of BIMcloud Manager are not available in BIMcloud Basic. This step will delete and remove all tags you have assigned to Project/Library items.

1. Go to the Projects page of BIMcloud Manager. (Or click Check in the Downgrade wizard to take you there.)
2. You are prompted to Delete All Tags.

STEP 8: Disconnect BIMcloud Servers
BIMcloud Basic can connect to only a single BIMcloud (model) Server. In this step, remove all extra BIMcloud Servers, so that only one remains.

1. Go to the Servers page of BIMcloud Manager (Or click Check in the Downgrade wizard to take you there.)
2. Select the BIMcloud Server that will no longer be used
3. Click Disconnect.

STEP 9: Disable external Snapshot folder
The option to save Snapshots to an external folder is not available in BIMcloud Basic. If you have activated this option in BIMcloud, you must now disable it, in order to use BIMcloud Basic.
If you do not disable it, your BIMcloud server will go offline after the downgrade!

1. Open the BIMcloud Server Configurator from the tray icon:

   ![BIMcloud Server Configurator](image)

2. The Configure dialog box opens. Click Next to open the BIMcloud Only settings page.

3. Uncheck the box to Save Snapshots.

![BIMcloud Only settings](image)

### STEPS 10 and 11: Move BIMcloud Server and/or BIMcloud Manager

BIMcloud Basic does not support folders on the Servers page.

If your BIMcloud Server or BIMcloud Manager is located in a folder, you must move it to the Servers Root:

1. Go to the Servers page of BIMcloud Manager (Or click Check in the Downgrade wizard to take you there).
2. Select the Server that is located in a folder.
3. Click Move to Folder, and choose the Servers Root.

STEP 12: Eliminate Folders from Server Root

BIMcloud Basic does not support folders in the Server Root.

Note: These folders are now empty: in the previous steps, you moved any servers they had contained.

1. Go to the Servers page of BIMcloud Manager (Or click Check in the Downgrade wizard to take you there).
2. Select the folders.
3. Click Delete.

STEP 13: Change to Simplified Permissions

In BIMcloud Basic, only Simplified Permissions mode is available.

1. On the Servers page, select the BIMcloud Manager (Or click Check in the Downgrade wizard to take you there).
2. In General Settings, click Edit, and choose the Simplified option at Management Roles.
3. Click **Save**.

**STEP 14: Disconnect LDAP Services**

LDAP is not available in BIMcloud Basic.

1. On the Servers page, select the BIMcloud Manager and go to the LDAP page (Or click **Check** in the Downgrade wizard to take you there).

2. Select the Directory service from the list and click **Disconnect**.
Complete Downgrade

As shown in the Wizard, you have successfully completed all the steps required for downgrade. Click **Downgrade** to complete.

<table>
<thead>
<tr>
<th>Downgrade progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Create Backups</td>
</tr>
<tr>
<td>✓ Lock Version</td>
</tr>
<tr>
<td>✓ Delete Incompatible Projects</td>
</tr>
<tr>
<td>✓ Move Projects</td>
</tr>
<tr>
<td>✓ Move Libraries</td>
</tr>
<tr>
<td>✓ Eliminate Sub-Folders</td>
</tr>
<tr>
<td>✓ Delete All Tags</td>
</tr>
<tr>
<td>✓ Disconnect BIMcloud Servers</td>
</tr>
<tr>
<td>✓ Disable external Snapshot folder</td>
</tr>
<tr>
<td>✓ Move BIMcloud Server</td>
</tr>
<tr>
<td>✓ Move BIMcloud Manager</td>
</tr>
<tr>
<td>✓ Eliminate Folders from Server Root</td>
</tr>
<tr>
<td>✓ Change to Simplified Permission</td>
</tr>
<tr>
<td>✓ Disconnect LDAP Services</td>
</tr>
</tbody>
</table>

**Downgrade**
Uninstall BIMcloud

Each BIMcloud component can be uninstalled independently. However, if you uninstall the BIMcloud Manager, then you will not be able to work on any of the previously connected BIMcloud Servers unless you reconnect them to a different BIMcloud Manager.

To uninstall a BIMcloud component,

- Go to the BIMcloud Tray Application and use Remove Component from the item’s context menu; or
- Use the Uninstall shortcut located in the component's install folder
BIMcloud Manager

Manager Web Interface
Projects Page
Users Page
Roles Page
My Tags
BIMcloud Servers Page
Hosted Projects/Libraries
Access Panel
List of Permissions
Activities Panel
Notifications
List of Notifications
Connection Settings
BIMcloud Tray Icon
Manager Web Interface

This web interface is the main control center of your BIMcloud. It is designed to help you fulfill all management tasks related to the BIMcloud. Also, it is a flexible tool in the hand of all users to review their own settings and get information about the projects they are currently working on.

You can open the BIMcloud Manager web interface from any computer which has network access to the BIMcloud. Use the same URL in your browser as you use in ARCHICAD.

The initial server administrator signs on as the Master Administrator (masteradmin), and has full access to all controls. He/she then proceeds to add users and assigns them roles and permissions as appropriate.

This manual inserts a Note whenever there is a difference between the functions or the behavior of the products. E.g.: “Not available in BIMcloud Basic”.

Components of the Manager Web Interface are described below:

- Home Screen
- Content Types
- Header
- Navigator
- Summary
- Panels
- Background Jobs
- Settings Inheritance
Home Screen

The Home Screen is the main landing page of the BIMcloud Manager web interface. This will automatically open after a successful login. You can return to this page at any time by clicking the Home button from the breadcrumbs.

This page provides a shortcut to current Notifications and to your current joined projects on the BIMcloud. The icons at the top are shortcuts to the different content types.

The Home page also contains the server’s address, which can be used from ARCHICAD to connect to this server.
Content Types

Each BIMcloud content type has its own properties and functions. The content types are separated from each other in the web interface, but their interrelationships are reflected in a number of logical weblinks between the content types.

Content types:
- Projects
- Users (and Groups)
- Roles
- My Tags
- Servers
- Dashboard (visible to Server Administrators by default)

Note: Previous BIMcloud versions also used the “Libraries” content type. However, libraries are now listed with Projects. If your BIMcloud interface still shows the Libraries page, navigate to it and click “Don’t Show Again” to remove it from the interface.

Click on the link you wish to view.

Although there are different content types, their basic behavior is similar no matter what you are viewing or editing. Generally, the web page interface is divided into four parts:
- Header
- Navigator
- Summary
- Settings/Details
Header

The header contains notifications about the BIMcloud and shortcuts for different settings.

Next to the name of the BIMcloud is a pop-up with the following information:

- Currently running job(s)
- Warning(s) and information about the BIMcloud
- Shortcut to the BIMcloud Manager settings

Note: The content of this pop-up changes depending on your permissions.

On the right side of the header is your avatar and name. The pop-up next to your name contains the following items:

- **User settings** takes you to your own user page.
- **Language** allows you to change the language of the web interface. (This language change does not affect the other users; it is your personal setting.)
- **Log out** gets you out of the BIMcloud Manager web interface.

The Help link on the far right side opens the BIMcloud help.

Note: Changing Language is not available in BIMcloud Basic.

The breadcrumbs show your currently open page. Use the pop-up in the breadcrumb to quickly switch between the different content types.

If you create a Bookmark in your browser, then it will always return you to the page represented by your breadcrumb (including the currently active panel and even search results).
**Navigator**

The Navigator lists all elements of the currently selected content type. Each Content type has a Root item (which acts as a folder) shown in the Navigator.

Click an element to select it and display further information about it.

*Note:* Depending on your permissions, the elements you see here, and the information displayed, can vary.

**New Item Function**

The Root items of the Navigator contain a + button, which is a shortcut to create new items.

The new item will be created in the currently selected level of the hierarchy. (If the content type does not have a hierarchy in the Navigator, then it will be created in the Root folder).

*Note:* Depending on your permissions, the create function might not be available for you.

**Navigator Layouts**

The Navigator can switch between three different layouts:

- Single Column
• Hidden
• Expanded

Switch between the layouts using the arrows on the right side of the Navigator.

**Expanded Layout**

Expanded Layout shows more detailed information in a table format. You can sort the columns to find the information you are looking for.

**Layout Limitations for Small Screen Devices**

• Expanded layout is not available due to the lack of horizontal space
• The Navigator automatically hides itself after a successful item selection
Navigator View Type

The Navigator can display items in Tree view, or as a Flat list:

Tree View

On the Projects and Servers pages, all Navigator items can be displayed in a tree style view according to their position in the hierarchy. Open/close the tree branches by clicking the arrow on the left side of the folders.

Note: The User/group and Roles content types have no tree view, because those content types use no hierarchy.
Flat List

Items are displayed in a flat list regardless of their position in the hierarchy. However, the item’s path in the hierarchy is displayed in a second line.

Select/Multi-select/Filter Navigator Items

- **Select** an element by clicking on it.
- **Multi-select**: Activate multi-selection by clicking the checkmark icon on the top left of the list
• **Filter** items using the pop-up. The available quick filters depend on the currently selected content type.

![Filter pop-up](image)

**Search Navigator Items**

Click the Search icon and enter a text.

![Search icon](image)

Click X to cancel the Search.

Search results are always displayed in a flat list.

On the Projects page, you can search for items by tag as well as text.

*See Find Items by Tag.*
Summary

The Summary, displayed to the right of the Navigator, provides key functions and a quick overview about the selected item.

The Summary has the following sections:

- **Name**
- **Functions**
- **Quick Info**
- **Joined Projects or Users**

**Summary Sections:** Name - Functions - Quick Info - Joined Projects or Users
• Functions: These vary depending on the content type.
  – Tags (on the Projects page only): Shows any tags assigned to the item. Tag management commands are also available here.

• Quick information: Displayed in multiple rows. Most of the rows also act as a link to a page, where further information is available. If you do not have permission to view further details about a linked item, then the link is blocked.

• Joined users/projects:
  – For a selected User (Users page only): the projects the user has joined.
  – For a selected Project (Projects page only): the users who have joined this project.
Panels

Panels (e.g. Settings, Activities, Access) display and allow editing of all the parameters and properties of the selected item(s).

Information in each panel may be organized into several sections. Click the Edit button on the section header to edit its content. Click Save or Cancel to complete editing.

Note: Only one section can be edited at a time. If you try to edit a different section or navigate away from the current page a warning will remind you to store your settings first.

In some cases, the Edit command opens an additional Details panel, with additional editing options. Close this temporary panel by clicking the X icon on its tab.
Background Jobs

Most functions will complete instantly when they are clicked, but some take longer. In these cases, the process will turn into a background job; the user can keep working.

Multiple background jobs can run at the same time. Typically you will only see the background jobs started by you.

You will receive a notification if a clicked function has become a background job. While the job is running, you will see a progress indicator progress in the BIMcloud Manager header pop-up.

You are also notified once the background job is complete, with information on whether the job was completed successfully or encountered errors.
Settings Inheritance

Note: Not available in BIMcloud Basic.

The BIMcloud allows you to set up generic rules for a group of items by arranging them into a hierarchy and applying the settings at a higher level: that is, items at a lower hierarchical level inherit settings from those at a higher level. Settings for the Root element of the content type will be inherited by all items of that content type.

Note: Not all content types can be organized into a hierarchy. In those cases (e.g. Users, Roles), the only hierarchy is between the Root item and all the others. For these content types, too, settings applied to the Root will be inherited by all child items.

The inherited settings can be overridden at lower levels, if you have the necessary permissions.

See Inheritance of Access Rights.
Projects Page

The Projects page lists the BIMcloud’s projects and libraries, organized into folders. Set up a project/library folder hierarchy in any way you like.

**Note:** Folder hierarchy is limited to a single level in *BIMcloud Basic*.

Permissions for projects, project folder(s) and project root contain ARCHICAD level permissions as well. If a user Joins a project from ARCHICAD, then the permissions granted on the project’s access panel will control what he/she can do in ARCHICAD.

Permissions are inherited: a permission granted at a higher level will apply at all lower levels unless it is specifically withdrawn in a custom role.

▲ Required permissions to view projects/folders:
- Simplified management: **Project/Server administrator**
- Detailed management: **View item permission** (Traversing applies)

▲ Required permissions to Join a project using ARCHICAD:
- Simplified management:
  - Project/Server Administrator management role or
  - Any user who has been added to the project’s Access list (even without any further permissions)
- Detailed management:
  - Any user who has View item permission for the project. (Traversing applies)

▲ Required permissions to work from ARCHICAD:
- Use the ARCHICAD permissions to control what each individual user can do in ARCHICAD (*see ARCHICAD Related Permissions*)

**Related Topics:**
- Navigator
- Functions
- Summary
- Panels
- Project/Library Snapshot and Restore
- My Tags
Navigator

The Projects Navigator lists the projects and libraries to which you have access.

You can organize these items into folders as needed, e.g. all projects belonging to a studio go into one folder, or all libraries into one folder. (Use the Move command to organize items: see Move Item.)

**Note:** Folder hierarchy is limited to a single level in BIMcloud Basic.

On the Projects page, the Navigator has two view options:

- **Tree view:** Hierarchy is displayed
- **List view:** All projects/folders are displayed in a list. Their location in the hierarchy is displayed in the second line of each item. List view is easier to sort, because it omits the folder hierarchy.
Filters

The following filters are available to narrow down the items displayed in the Navigator:

- **Show All**: all projects, libraries and folders, or
- a particular category only

You can Focus on folders to limit the number of displayed items to its child elements only. In a focused view, the items in the Filter pop-up will change and the filters will only apply to the focused branch of the hierarchy.

**Focus on Folder Item**

Quit from focused view by selecting the Show All filter or clicking the **Focus** button again.
Expanded View

In the expanded view, the following columns are available:

- Tags used (by color)
  
  **Note:** Tags not available in BIMcloud Basic.

- Number of Joined users
- Project version
- Project size (Total size for folders)
- Last snapshot
- Modified date
- Host server

Use these columns to quickly sort among your projects. Switch to flat list view to sort globally (otherwise it sorts within folders only).
Functions

Available functions for Projects vary depending on what you have selected in the Navigator: Root, Folder, Project or Library.

Functions Available for a Selected Project

<table>
<thead>
<tr>
<th></th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Tags</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Create Folder</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Duplicate</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Move</td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Change host</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Export</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Force Leave all</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Each function is described in the following sections:

**My Tags**
**Create Folder**
**Project Status**
**Duplicate Project, Library or Folder**
**Move Item**
**Change Project’s host server**
**Export Project or Library**
**Import Project or Library to Folder**
Delete Project/Folder
Force Leave All Users from Project
Create Folder

**Note:** Folder hierarchy is limited to a single level in **BIMcloud Basic**.

Creates a folder inside the currently selected folder. This function is available if the Projects root folder or any other folder is selected.

Click **Create Folder** and enter the new folder name in the appearing dialog. Make sure the new folder name is unique within this folder.

 لقد تم تحديث المحتوى المستند إلى النسخة المحدثة. يرجى إعادة نشر المحتوى في السياق المناسب.

- **Required permissions to create folders:**
  - Simplified management: **Project/Server administrator**
  - Detailed management:
    - **Modify folder content** for the parent folder (or root)
Project Status

Project status reflects:

- whether its host server is running and accessible
- whether its data is available on the host server
- whether the project is accessible or locked

The popup contains different commands for the different statuses:

- **Lock / Unlock** depending on its lock status.
- **Link to...**: If the project’s data is not found on the host server, then it can be re-linked to a different, currently unused project.

*See Hosted Projects/Libraries.*

**Required permissions:**

- Simplified management: **Server/Project administrator**
- Detailed management: **Lock/Unlock project**

Projects are accessible by default.

Lock/Unlock Project

The Lock function is designed to “freeze” the project data for a short period while an administrator carries out management functions.

While a project is locked, joined users cannot send/receive changes or make any changes in project data.

A project is also locked automatically when you migrate a Teamwork project from one version to another. (Teamwork > Migrate Project)

A locked project is listed with a red badge in the navigator:
Locked Project

Similarly, a locked project is shown with a lock icon in ARCHICAD’s Open/Join Teamwork Project dialog box.

Once the project is unlocked, users can again work in the project and send/receive changes.
Duplicate Project, Library or Folder

Use this if you want to create a project, library or folder with settings and content similar to those of an existing one.

If a folder is duplicated, then all its child items will be duplicated. The newly created items will inherit both the original permissions and their new parent’s permissions.

1. Select the existing item.
2. Click **Duplicate** from the Summary panel.
3. In the appearing dialog, give the duplicate item a new name.
4. Choose a folder location for the duplicate.
5. Click **Duplicate** to create the copy.

![Duplicate project dialog](image)

Required permissions:
- Simplified management: **Server/Project administrator**
- Detailed management:
  - **Modify folder content** for the parent folder (or root)
Move Item

Moves the selected item(s) to a new folder. The function is available for all items. This will also move the child item(s) of the selected folder.

Click the function and pick a folder to which to move the item.

**Note:** The folder picker will contain all the folders you can see in the Navigator. To select a folder as a destination, you must have permission to modify its content.

**Required permissions:**
- Simplified management: **Server/Project Administrator**
- Detailed management:
  - **Delete/Remove folder content** for the parent of the selected item
  - **Modify folder content** for the target folder
Change Project’s host server

**Note:** Not available in BIMcloud Basic.

Use **Change Host** to move a project’s data from one host server to another. The process will put the project into an offline state for the Joined users, but once the process is complete, the project will be online again and they can send in changes.

The Change Host process keeps

- **Required permissions:**
  - Simplified management: Server Administrator
  - Detailed management:
    - **Modify** hosted content for the Source and Target host servers
Import Project or Library to Folder

Use the Import function to import a Project file (extension .BIMProject) or a Library file (.BIMLibrary) into a selected folder.

These file formats are created either by exporting a project/library from the BIMcloud (see Export Project or Library, below) or by creating a Project or Library snapshot (see Project/Library Snapshot and Restore.)

1. In the Navigator, select a folder.
2. From the Projects pop-up or the Functions area, click Import.

3. Browse for the file (.BIMProject or .BIMLibrary) you wish to import.

You can also import a file with the .archive extension. In this case, the dialog will prompt you to specify whether the file is a project or a library.

4. A server pop-up appears (if your permissions allow): select a Host Server for the imported project.
5. Click Import.
Required permissions:

- Simplified management: **Server administrator**
- Detailed management:
  - Modify folder content
  - Modify details
Export Project or Library

Use this function to save a **Project** or **Library** as a file (.BIMProject23 or .BIMLibrary).

1. In the Navigator, select a the Project Root, a folder, a Project or a Library.
2. From the Functions area, click **Export**.

3. Click **Export**.

4. If needed, check options to include snapshots in the exported file.

Browse for the file destination if your browser requires it. Otherwise it will be downloaded into your default download folder.

**Related Topic:**

**Export List of Projects or Libraries**
Export List of Projects or Libraries

1. In the Navigator, select a Project or Library Folder (or the Project Root).
2. From the Functions area, click **Export**.
3. A list of the folder contents (e.g. all libraries with their key data) are downloaded in CSV format, in a zipped folder. The list can be opened in Excel.
   
   If the selected item is the Project Root: The Export command downloads the list of all projects on the BIMcloud.

**Related Topic:**

*Export Project or Library*
Delete Project/Folder

Deletes the selected project or folder. If a folder is selected, all of its contents will be deleted along with the folder!

Required permissions:

- Simplified management: Project/Server administrator
- Detailed management: Delete/Remove folder content for Parent folder and all of its subfolders
Force Leave All Users from Project

1. Select one or more projects in the Navigator.
2. Click **Force leave all**.

This results in Force Leave for all users who are joined into the selected Project(s).

See also [Force Leave Selected User(s)](#).

![Plaza Hotel Project](image)

Required permissions to force leave a user from a project:

- **Simplified management:** Project or Server administrator
- **Detailed management:** Modify access for the project
Summary

Summary information is shown for each selected item from the Navigator (Root, Folder, Project or Library).

<table>
<thead>
<tr>
<th>Version</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ARCHICAD program version</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Size of selected project; or Total size of all projects (viewable by me) in the selected folder</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modified</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Date/time of last modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Last BIMProject Snapshot</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Date of last BIMProject snapshot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Last PLN Snapshot</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Date of last PLN snapshot</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Server</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>Name of BIMcloud Server hosting this project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List of Joined users</th>
<th>Root</th>
<th>Folder</th>
<th>Project</th>
<th>Library</th>
<th>The users who have joined this project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As applicable, click on an item to navigate to the relevant page of BIMcloud Manager (for example, click on the Host Server item to open the Servers page.)
Joined Users

The users listed in this section are currently Joined to the project. The color of the dot next to their name indicates their online/offline status:

- **Online**: Blue
- **Offline**: Gray

Icons next to each user name indicate the type of client application on which the user is working (e.g. ARCHICAD or mobile BIMx application).

“Last active” displays the last time the user was online. (If user is online now, this is not shown.)
Force Leave Selected User(s)

1. Select one or more projects in the Navigator.
2. In the Joined users list, hover over a user name to display the **Force Leave** icon.
3. Click to Force Leave.
**Force Leave multiple users**

1. In the Joined user(s) list, click the checkmark above the list to enable checkboxes.

2. Check users whom you want to Force Leave from the project: The “Force Leave selected” button is enabled.

3. Click “Force leave selected.”

*See also* [Force Leave All Users from Project](#).

**Note:** Force Leaving a user is immediate; the user will not be able to send in his/her changes. A Force Leaved user can re-join the project immediately without further restrictions. If you would like to prevent the user from re-joining the project, revoke his/her permissions on the project’s access panel.

*Required permissions to force leave a user from a project:*

- Simplified management: Project or Server administrator
- Detailed management: Modify access for the project
Panels

Available Panels on the Projects Page and their content vary depending on what is selected in the Navigator:

- Project Root
- Folder
- Project or Library
Project Root

The Project root acts as a folder.

Panels of the Project Root

Settings

Library Folder

This is the default Libraries folder (marked with a Library icon).

When you share a Teamwork project from ARCHICAD, the Share process (Libraries dialog) either uploads the project libraries to a folder on the BIMcloud, or links the project to existing BIMcloud libraries. By default, the Teamwork Share process uploads or links libraries to the Library Folder shown here.

This folder is created automatically and cannot be deleted or changed for the Project Root. (However, you can change the default Library folder of any other folder, at a lower level of the hierarchy.)

Default Host Server Settings

Note: Default host server settings are not available in BIMcloud Basic.

When a user shares a project from ARCHICAD, and places it in the currently selected BIMcloud folder, the project will be automatically hosted by the BIMcloud Server chosen here.

To change defaults, click Edit.

You can set separate default host servers for different versions of ARCHICAD, or use a single default folder for all ARCHICAD versions.
Required permissions to edit settings:
• Simplified management: Server administrator
• Detailed management:
  - Modify details for the selected item
  - Only those BIMcloud Servers appear in the default host server pop-up for which the current user has Modify hosted data permission

Snapshots

Note: Snapshot settings for Project root or folders are not available in BIMcloud Basic.

Click Edit on this panel to schedule project and library snapshots (backups). The schedule controls are the same as for a selected single Project/Library.

See the description at Snapshots.

• The Snapshot Schedule defined here is applied to the all the subfolders and projects/libraries of this Projects Root.
• Snapshot settings of Projects root are inherited by all child folders and projects/libraries. If you wish to override the default settings, define a local snapshot schedule for the selected item.
• Defining snapshot settings for the Projects root will not back up the contents of the Projects root folder. The only purpose of defining snapshot settings for a folder is to apply these snapshot settings to its child folders and to the projects/libraries they contain.  

See Project/Library Snapshot and Restore for more information on the snapshot types and how to use snapshots.

Required permissions:

- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item

Activities

The Activities panel show all activities of all users across all projects.

See Activities Panel.

Access

See Access Panel.

Note: Access panel for Project root are not available in BIMcloud Basic.
Folder

The following panels are available for a selected Project or Library Folder:

Settings

Name: Name of the selected folder

Library Folder

This is the default Libraries folder for the selected Navigator item, inherited from its parent folder (or the Project Root).

When you share a Teamwork project from ARCHICAD, the Share process (Libraries dialog) either uploads the project libraries to a folder on the BIMcloud, or links the project to existing BIMcloud libraries. By default, the Teamwork Share process uploads or links libraries to the Library Folder shown here.

To change this default, click Edit.

From the Library Folder pop-up:

- Choose Select folder to pick a different folder as the default, or
- Defined manually from ARCHICAD: with this setting, the Share process from ARCHICAD requires the user to specify a Library folder on BIMcloud.

Default Host Server: This is the default host server for projects or libraries in this folder.

Note: Default host server settings is not available in BIMcloud Basic.

When a user shares a project from ARCHICAD, and places it in the currently selected BIMcloud folder, the project or library will be automatically hosted by the BIMcloud Server chosen here.

By default, the Default Host server Settings pop-up inherits its value from its parent folder (or the Project Root).

To change defaults, click Edit.

You can set separate default host servers for different versions of ARCHICAD, or use a single default folder for all ARCHICAD versions.
Required permissions to Edit settings:

- Simplified management: Server administrator
- Detailed management:
  - Modify details for the selected item
  - Only those BIMcloud Servers appear in the default host server pop-up for which the current user has Modify hosted data permission

Snapshots

By default, the Snapshot schedule of a selected Project or Library folder inherits its values from its parent folder (e.g. the Project Root).

Defining snapshot settings for a folder will not back up the contents of that folder. The only purpose of defining snapshot settings for a folder is to apply these snapshot settings to its child folders and to the projects/libraries they contain.

See also Project/Library Snapshot and Restore on how to use snapshots.

You can override these settings here, as needed. Click Edit on this panel to schedule snapshots for projects/libraries in this folder.

The schedule controls are the same as for a selected single Project/Library.

See the description at Snapshots.

Required permissions:

- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item

Activities

This panel shows all activities of all users across all projects located in the selected folder.

See Activities Panel.
Access

Note: Access panel for Project folder(s) are not available in BIMcloud Basic.

See Access Panel.
Project or Library

Settings

Name: Name of the selected project/library

Note: Use a different name for each project. Do not use the same name as that of an existing project, even if the letter cases are different (e.g. ParkingGarage and PARKINGGARAGE). If you do, users may not be able to Open or Join the project they need.

Required permissions to Edit settings:

- Simplified management: Server administrator
- Detailed management: Modify details for the selected item

Snapshots

Use the controls on this panel to schedule, create and manage project/library snapshots.

Required permissions to work with existing snapshots:

- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item
A snapshot can be of three kinds:

- BIM Project snapshots
- PLN Project snapshots
- Library snapshots

All types can be either automatically scheduled, or created manually at any time - for example, whenever the project reaches particular milestones.

See also Project/Library Snapshot and Restore on how to use snapshots.
**Snapshot Schedule**

Click **Edit** to choose a schedule for project or library snapshots:

- **Inherited**: use the Snapshot settings of the parent folder.
- **Defined locally**: override the default Snapshot settings

- **Don't Create**: This snapshot type will not be created
- **Hourly**: The snapshot will be created hourly, based on the below settings
- **Daily**: The snapshot will be created at a set time each day
Enter the number of automatic snapshots to keep. (You must keep at least one copy.) With each additional automatic snapshot, the oldest stored snapshot will be deleted. Click Save to save changes.

Required permissions to modify schedule:
- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item

Snapshots List

See the list of pending and existing Snapshots at the bottom of the Snapshots panel. Select any of the listed Snapshots to access applicable commands:

Create

Use this command to create a manual snapshot of the currently selected item (project or library).
- For a project: Choose the type of snapshot you want, and give it a name.
- For a library: Give the snapshot a name.
• **A BIMProject snapshot** starts immediately as a background job, and you will receive a notification after it completes. *(See Background Jobs.)* The new snapshot is listed in the Snapshots list (as well as on the Activities panel).

• **For a PLN Project snapshot:** The process is the same as for an automatically scheduled PLN snapshot. All clients are informed (via an icon in the Teamwork Palette) that a snapshot is pending. The snapshot will be created when a client clicks Create snapshot during a Send and Receive.

If a snapshot of the chosen type is already in progress or pending, you cannot create another one until the first one is complete.

**Keep Snapshot**
Available only if the selected file is an automatic snapshot. Click Keep to retain this automatic snapshot even after it would otherwise be scheduled to be deleted.

After you click Keep, the automatic snapshot becomes a Manual Snapshot, with an editable Name, and will henceforth be listed as a Manual Snapshot.

**Rollback**
Available only if the selected file is a BIMProject or Library snapshot.
*(See Rollback BIMProject or Library Snapshot on Same BIMcloud.)*

**Download Snapshot File**
Click Download, then browse for the file destination.
*(See also:)*
*Download Snapshot File, then Import to any BIMcloud and Download PLN Project Snapshot, then Open as Solo Project and Re-Share.*

**Delete Snapshot**
Click to delete the selected snapshot file. If the selected file is a pending PLN Snapshot, it is deleted from the list, and the snapshot will not take place.

**Activities**
This panel shows all activities of all users in the selected project.
*(See Activities Panel.)*

**Access**
*(See Access Panel.)*
Project/Library Snapshot and Restore

Schedule a snapshot on the Snapshots panel, available for Project Root, Folders, Projects, and Libraries.

*For a description of the controls, see Snapshots.*

**PLN Project Snapshots**

PLN Project Snapshots contain your model data only, and can be used to reopen the project in solo ARCHICAD mode. The PLN Snapshot process utilizes a client’s computer and requires client confirmation before the snapshot can be created.

**Note:** PLN snapshots will only be run on the computers of those users whose role includes the following permission: “PLN Snapshot - Use computer for creating”.

When it is time for a scheduled PLN snapshot, all clients (whose role includes the permission entitled “PLN Snapshot - Use computer for creating”) will notice a “pending snapshot” icon in the Teamwork Palette accompanying the Send & Receive commands.

This means that - once the time comes for a scheduled PLN snapshot - if a user issues any of these commands (Send & Receive, Send Changes, Receive Changes, or Send Changes & Comment), he/she will be informed that a PLN snapshot is pending, and that a full Send & Receive is necessary to carry this out.

The two options:

1. Click **Continue**. A Send & Receive will occur, followed by the PLN snapshot process.
2. Click the other button (its text varies depending on the command issued). The original command will be carried out (e.g. Send & Receive), but no snapshot will take place.

Although any number of online users may be alerted to and asked to perform a pending PLN snapshot, only one of them needs to click **Continue** to carry it out. (At this point, the “pending” icon disappears from the Teamwork Palette.) The rest of the users can work as usual. While the PLN snapshot is in progress, the confirming user cannot work in ARCHICAD.

If *none* of the users clicks **Continue**, and *all* of them choose to skip the Snapshot process, the PLN project snapshot cannot be created. The “pending snapshot” icon remains visible on the Teamwork Palette, until one user agrees to do a full Send & Receive followed by the snapshot.

**BIMproject or Library Snapshots**

- BIMproject Snapshots contain model data, plus all BIMcloud related information, such as user data and roles. A BIMproject snapshot will be created automatically in the background according to the schedule set in the Project Snapshot Schedule dialog box.

- Library snapshots contain all the data of the library’s Library Parts. Reservation data is not included: even if a Library Part was reserved by a certain user at the time of the snapshot, it will be free for reservation after the Rollback.

In case a BIMproject snapshot creation was started manually, then a snapshot job will appear at the top-right of the Manager interface to show its progress. Once the snapshot is completed it will appear in the list of snapshots.

No user interaction is needed to complete the snapshot.
Snapshot Files Location

In BIMcloud Basic (and by default for the BIMcloud):
Project and Library snapshot files are saved to the folder where you installed the BIMcloud Server, with an .archive extension.

• Project snapshot files of both kinds (BIMproject snapshots and PLN snapshots) are saved to Projects > [ID number] > Backups, at the location where you installed the BIMcloud Server, with an .archive extension.

• Library snapshots are saved to Attachments > [ID number] > Backups, at the location where you installed the BIMcloud Server, also with the .archive extension.

In BIMcloud only: You can configure a preferred external folder to store your snapshots:
See BIMcloud Server Configuration.
You can optionally redefine the snapshots folder:
See Redefine Snapshot Folder.
As long as the BIMcloud is running, you can download the saved snapshot files to any other location of your choice (see below). At download, the file’s extension becomes .BIMLibrary or .BIMProject.

How do I Restore the Snapshot Files?

BIMproject and Library snapshots can be restored to a running BIMcloud.
See these sections:
Rollback BIMproject or Library Snapshot on Same BIMcloud
Download Snapshot File, then Import to any BIMcloud

PLN snapshots can only be opened as solo ARCHICAD projects, then re-shared.
See this section:
Download PLN Project Snapshot, then Open as Solo Project and Re-Share

Rollback BIMproject or Library Snapshot on Same BIMcloud
Use Rollback to either replace the current project/library version (the one selected in the Navigator) with the snapshot file, or to create a new project.

1. From the Navigator of the Projects page in BIMcloud Manager: Select a project or library.
2. Open the Snapshots panel.
3. From the Snapshots list, select a BIMproject or Library snapshot.
4. Click **Rollback**.

5. Choose a Rollback Option:

   - **Overwrite this Project/Library**: The selected snapshot will overwrite and replace the current selected item.
     
     For a Project Rollback: All users must re-join the new version of the project. (Users must discard any unsent changes, or save the version they currently have as a solo project, but they can no longer send any unsent modifications to a project that has been overwritten.)
   
   - **Create New Project/Library from Snapshot**: The selected snapshot file will be created as a new, separate project or library on the server.

6. Click **Rollback**, then **OK**.

   The project or library is now available in the BIMcloud Manager’s Project page.
**Download Snapshot File, then Import to any BIMcloud**

If you want to work with the project or library on a different, functioning BIMcloud: download the snapshot file, then import this file to a different BIMcloud.

1. From the Navigator of the Projects page in BIMcloud Manager: Select a project or library.
2. Open the Snapshots panel.
3. From the Snapshots list, select a BIMproject or Library snapshot.
4. Click **Download**.
5. Choose a folder to which to save the snapshot.
6. Import this snapshot to a folder on any functioning BIMcloud, using the Projects page of its BIMcloud Manager.

*See Import Project or Library to Folder.*

**Note:** Since a BIMproject snapshot contains all user data and roles, you can resume working right away - no need to re-add users or re-define roles.

**Download PLN Project Snapshot, then Open as Solo Project and Re-Share**

**PLN snapshots** can only be opened as solo ARCHICAD projects. You can use any version of ARCHICAD to open them. As soon as you gain access to a functioning BIMcloud, re-share this project and continue in Teamwork.

1. From the Navigator of the Projects page in BIMcloud Manager: Select a project.
2. Open the Snapshots panel.
3. From the Snapshots list, select a PLN snapshot.
4. Click **Download**.
5. Choose a folder to which to save the snapshot file.
6. Open this PLN file as a solo project, using any current or future version of ARCHICAD.
7. As soon a BIMcloud is running again, re-share the project and continue working in Teamwork.
Users Page

Use this page to manage BIMcloud users and organize them into groups.

Required permissions to view users/groups:
- Simplified management: Project or Server administrator
- Detailed management: View item permission (Traversing applies)

Topics in this section:
- Navigator
- Functions
- Summary
- Panels
Navigator

The Users Navigator list view displays the Users root, and the users and user groups that it contains.

Note: User groups and all their related features are not available in BIMcloud Basic.

There is no “tree view” option on the Users page, just a list. This is because one user can be a member of multiple groups; this type of hierarchy cannot be represented by a simple tree.

A group can contain other groups. (In such a hierarchy, the containing group is called a parent group.) In the user list, a selected user or group name is followed by the name of any parent group(s) in the line below.

Note: Circular membership references are not allowed. E.g. if Group A is a member of Group B, then Group B cannot be a member of Group A.

Filters

The user List displays all users and all groups by default. As needed, use the filter to limit the list:

- All: all users and groups.
- Users: only users.
- Groups: only groups.
- Using BIMcloud User license: users who are currently using a BIMcloud User License (automatic or assigned).
• **Using automatic BIMcloud User license**: users who are currently using automatically reserved BIMcloud User License.

• **Using assigned BIMcloud User license**: users who are currently using manually assigned BIMcloud User License.

• **Joined to project(s)**: users currently Joined to at least one project.

If you have selected a group, you can further filter the displayed contents (e.g. to show just holders of particular license types).

**Expanded View**

In the expanded view, the following columns are available:

- Number of Joined projects
- Default role
- LDAP
- Last active
- License(s)

- Gray: Not using a license
- Black, empty in the middle: Automatically reserved license
- Black, dot (pin) in the middle: Permanently assigned license

- User Color

Use these columns to quickly sort among your users.
Functions

Available functions for Users vary depending on what you have selected in the Navigator: Users Root, Users Group, or User.

<table>
<thead>
<tr>
<th>Function</th>
<th>Root</th>
<th>Group</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create User</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Group (Not available in BIMcloud Basic)</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Duplicate</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Import</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Force Leave All</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Send Email (Multi-selection)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Each function is described in the following sections:

Create User
Create Group
Enable/Disable User
Duplicate User/Group
Export Users
Import Users
Delete User(s)/Group(s)
Force User(s) to Leave All Projects
Send Email
Create User

Click the plus-sign pop-up and choose Create User. (If the Users root is selected, you can also choose the command from the Summary panel).

Enter the name of your user along with his/her new password.

Click **Next** and enter the remaining parameters in the User's settings panel. 

*See Settings.*

- **Required permissions:**
  - Simplified management: **Server administrator**
  - Detailed management: **Modify folder content** for User root
Create Group

Note: Create Group is not available in BIMcloud Basic.

Click the plus-sign pop-up and choose Create Group. (If the Users root is selected, you can also choose the command from the Summary panel.)

Enter the name of the group in the dialog and click Create.

The Group settings panel will open; you can start to add members to your new group.

Required permissions:

- Simplified management: Server administrator
- Detailed management: Modify folder content for User root
Enable/Disable User

Users are enabled by default. If you disable a user, this temporarily revokes his/her access to all projects and management resources.

A disabled user can continue to work on his/her already joined projects offline and send in changes after he is enabled again.

A disabled user also gets a badge on the navigator for easier visual identification:

Required permissions:
- Simplified management: Server administrator
- Detailed management: Enable/Disable User
Duplicate User/Group

Use this if you want to create a user with settings similar to those of an existing user/group.

Select the existing user, then click **Duplicate** from the Summary panel. Give the duplicate user a new name. Then adjust its settings in the Settings panel.

 риск Required permissions:

- Simplified management: **Server administrator**
- Detailed management: **Modify folder content** for User root
Export Users

Use this function if you want to transfer users to a different BIMcloud, or to store user data for backup purposes. Select the user(s) you wish to export:

- To export all users, click on the Users root folder.
- To export all users from a particular user group, focus on the group and select all its users.
- To export a single or multiple users/groups, select them in the Navigator.

Click **Export**. Data for all the users you are exporting will be placed into a single file and downloaded into your browser’s download folder, with extension **.BIMUsers**.
Import Users

Click the **Plus** button on the User root, or select the User root and click **Import** from the available functions. Browse for a file containing the users to import (with extension `.bimusers`). The user file is imported to the BIMcloud Manager. If the BIMcloud Manager already contains a user with the same name as an imported user, the imported user is renamed with a suffix (the existing user will not be overwritten).

A dialog box informs you of the number of users imported, as well as the number of any imported users that were renamed.

A new group will be created with the date and time of the import, and all newly imported users and groups will be added as members. To see the import result, click the **Focus** button on the new group to view its contents.

- **Required permissions:**
  - Simplified management: **Server administrator**
  - Detailed management: **Modify folder content** for User root
Delete User(s)/Group(s)

Select one or more users or user groups to delete. Confirm the Delete process in the upcoming dialog box.

You cannot delete users or groups that originate from an LDAP directory service.

Required permissions:

- Simplified management: Server administrator
- Detailed management: Delete/Remove content for User root
Force User(s) to Leave All Projects

1. Select one or more users or user groups in the Navigator.
2. Click **Force leave all**.

This results in Force Leave for all selected user(s) from all their joined projects.

**Note:** To multi-select items in the Navigator, activate the checkboxes by clicking the checkmark at the top of the page.

*See also* Force Leave User.

Required permissions to force leave a user from a project:

- **Simplified management:** *Project or Server administrator*
- **Detailed management:** Modify access for the project
Send Email

*Note: Email is not available in BIMcloud Basic.*

Use this function to send an email (e.g. to announce a scheduled server maintenance) to one or more selected Users.

Select one or more Users from User list, or select a User Group.

Click **Send Email** to compose a message.

*Note:* To use this feature, you need a configured SMTP server. (This is done on the Servers page, under the BIMcloud Manager’s Settings panel, at Email preferences.)

See **Email Preferences**.

- Required permissions to Send email:
  - Simplified management: **Server administrator**
  - Detailed management: **Modify details** for the User root
## Summary

Summary information is shown for each selected item from the Navigator (Root, Group, or User):

<table>
<thead>
<tr>
<th></th>
<th>User</th>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>License(s) (not in BIMcloud Basic)</td>
<td>+</td>
<td></td>
<td>Indicates whether user has a BIMcloud User License.</td>
</tr>
<tr>
<td>Members (not in BIMcloud Basic)</td>
<td>+</td>
<td>+</td>
<td>Number of members and groups within the selected group.</td>
</tr>
<tr>
<td>Directory service (not in BIMcloud Basic)</td>
<td>+</td>
<td>+</td>
<td>Indicates whether the selected Group or User was imported through a Directory Service. (<a href="#">See BIMcloud Manager - LDAP Panel.</a>)</td>
</tr>
<tr>
<td>Default role</td>
<td>+</td>
<td></td>
<td>User’s Default role, if assigned.</td>
</tr>
<tr>
<td>Management role</td>
<td>+</td>
<td></td>
<td>In case Simplified Management is in use. (<a href="#">See Permission Management: Simplified and Detailed.</a>)</td>
</tr>
<tr>
<td>Last active</td>
<td>+</td>
<td></td>
<td>The last time the User interacted with the server.</td>
</tr>
<tr>
<td>Joined projects</td>
<td>+</td>
<td></td>
<td><strong>List of projects</strong> the user is currently joined into.</td>
</tr>
</tbody>
</table>
Joined Projects

The projects listed in this section are currently Joined by the selected user. The color of the dot next to the name indicates his/her online/offline status:

- **Online**: Blue
- **Offline**: Gray

Icons next to each user name indicate the type of client application on which the user is working (e.g. ARCHICAD or mobile BIMx application).
Force Leave User

1. Select a user from the Navigator.
2. In the Joined projects list, hover over a project name to display and click the Force Leave icon.

**Kovacs P. Gabor**

- **Enabled**
- **Export**
- **Duplicate**
- **Delete**

**Force Leave all**

- Management role: Project Administrator
- Default role: Lead Architect
- Last active:

**Joined projects:** 2

- **PlaceStair**
  - Budapest
  - Last active: 2017/01/12 13:43

- **Parking Garage**
  - Budapest

**Force Leave User from Single Project**

**Force Leave from Multiple Selected Projects**

1. In the Joined projects list, click the checkmark above the list to enable checkboxes.
2. Check project(s) from which to Force Leave the user.
3. The “Force Leave selected” button is enabled: click to Force Leave the user.

*See also Force User(s) to Leave All Projects.*
Force Leave User from Multiple Projects

**Note:** Force Leaving a user is immediate; the user will not be able to send in his/her changes. A Force Leaved user can re-join the project immediately without further restrictions. If you would like to prevent the user from re-joining the project, revoke his/her permissions on the project’s access panel.

Required permissions to force leave a user from a project:

- Simplified management: **Project or Server administrator**
- Detailed management: **Modify access** for the project
Panels

Available Panels on the Users Page and their content vary depending on what is selected in the Navigator:

- Users Root
- User
- User Group
Users Root

Settings
User root has no settings, this panel is empty.

Activities
This panel shows activities of all users across all projects.
See Activities Panel.

Access
See Access Panel.
Access panel is not available while using the Simplified management mode.

Note: BIMcloud Basic allows only Simplified management, thus the Access panel is never available.
User

Settings

Click **Edit** to modify the fields in any of the sections of User Settings.

**Note:** You cannot edit certain parameters of users that originate from an LDAP directory service. These parameters are marked with an LDAP tag.

Licenses Section

**Note:** Licenses section is not available in BIMcloud Basic.

Each user working on the BIMcloud requires one BIMcloud User License, regardless of how many projects the user is joined into. The license is automatically reserved for each user when he/she opens a Teamwork project in ARCHICAD.
A BIMcloud User License remains automatically reserved until the user closes ARCHICAD, or goes offline for any reason.

Alternatively, an administrator can manually assign a license to the user: click Assign. A manually assigned BIMcloud User License remains assigned to the user even after the user closes all projects on the BIMcloud or goes offline.

An Administrator can revoke this manually assigned license with the Revoke button. If available, an automatic license is then reserved for this user.

For general information, see The BIMcloud User License.

The icon shows the following:
- Gray: Not using a license
- Black, empty in the middle: Automatically reserved license
- Black, dot (pin) in the middle: Manually assigned license

Required permissions:
- Simplified management: Server administrator
- Detailed management: Manage licenses for the selected user
Personal Settings Section

- **Photo**: Click to browse for an image-format file to use as a user photo, with a maximum file size of 2MB.

- **Color**: Click the color picker to assign a user color.
- **Full Name**: Full name of the user. This name will appear in the header, and will be the name seen by other users in ARCHICAD. This field cannot be left empty.
- **Login Name**: Enter the login name of the User. Do not use spaces or special characters (e.g.,−/”…) This field cannot be left empty.
- **Email address**: Email address of the user. This field cannot be left empty.
- **Management role**: If the Simplified management mode is used, then you can assign the Management role for the user from this pop-up.
- **Default Role**: Choose a role from the pop-up. If you do not wish to assign a Default Role, then select “Not set” from the pop-up.

See Permission Management: Simplified and Detailed.

- If custom fields have been defined, they will also appear in the personal settings section. All custom fields are optional.

Parameters imported from LDAP servers are marked with an LDAP tag. Those parameters cannot be modified here.
Required permissions:

- Each user is allowed to modify his own Photo, Color, Full name and Email address (unless those are imported from an LDAP server)
- Simplified management: Server administrator
- Detailed management: Modify details for the user

Parent Groups Section

Note: Not available in BIMcloud Basic.
Displays the parent group(s) to which the user belongs.
Click Edit to modify the user or group’s parent group(s).

Add Parent Group

To add the currently selected item (user or group) as a member to another group, start typing the desired group name in the Add group field, and choose the group name when it appears.

You can only select groups for which you have Modify details permission.

Delete Parent Group

If a current parent group can be deleted for the currently selected item (user/group), that parent group is shown with an X button. Click the X to delete a parent group. (The selected item is no longer a member in that group.)
You can only delete groups for which you have Modify details permission.

Note: If the parent group membership stems from an LDAP database, this is indicated with a label. You cannot modify a user's parent group(s) if it comes from an LDAP database.

Required permissions to add or delete parent groups:

- Simplified management: Server administrator
- Detailed management:
  - Modify details for the currently selected user
  - Modify details for the selected parent group

Notifications Section

Note: Not available in BIMcloud Basic.
Notifications are informational or warning messages that automatically appear in the BIMcloud Manager.
In this section, click **Edit** to set Notifications preferences for the selected User.

**Display in BIMcloud Manager**

A User will see only those Notifications that are relevant, based on his/her User Role.

- **On:** All Notifications (Info as well as Warning messages) will pop up as needed in the relevant locations of the BIMcloud Manager.
- **Off:** Notifications will not pop up anywhere in the BIMcloud Manager interface.
- **Only Warnings:** Only Warning-type notifications will pop up.

*See Notifications for more information.*
Receive in email

Choose Daily Summary to automatically receive an email every morning, listing all current Notifications.

**Note:** To use this feature, you need a configured SMTP server. (This is done on the Servers page, under the BIMcloud Manager’s Settings panel, at Email preferences.)

*See Email Preferences.*

Password Section

For your own account: click **Change Password**.

For another user: click **Request password change via email**.

The user will receive an email informing him/her of the password change request, with a link to the password change page. The user then changes the password and returns to the Login page.

If the BIMcloud Manager is not able to send the email, then it will provide the link where the password can be changed. Send this link to the user to reset his/her password.

**P** Required permissions to request password change from other user(s):

- Simplified management: **Server administrator**
- Detailed management:
  - Modify details
This function is not available for users imported from an LDAP server.

Required permissions:
- Each user is able to change his/her own password
- Simplified management: Server administrator
- Detailed management: Modify details for the project

Activities
This panel shows all activities of the selected user across all projects.
See Activities Panel.

Access
See Access Panel.
Access panel is not available while using the Simplified management mode.

Note: BIMcloud Basic allows only Simplified management, thus the Access panel is never available.
User Group

Note: Groups are not available in BIMcloud Basic.

A group is a collection of users. One user can be member of any number of groups. A group can be a member of another group as well.

Settings

Settings Section

Name of the Group.

Parent Groups Section

Displays the parent group(s) to which the user/group belongs. Click Edit to modify the user or group's parent group(s).

- Required permissions to add or delete parent groups:
  - Simplified management: Server administrator
  - Detailed management:
    - Modify details for the currently selected user
    - Modify details for the selected parent group
Members Section

This section lists the members (users and groups) of the current group. Click the filter to display all members, or just users or just groups which are members.

Load more/Load all: If the group contains too many members to display at once, use the Load more or Load all buttons at the bottom to expand the list. Click Edit to add or delete members to/from the selected group.

Add Member to Group

Start typing the desired member name in the Add member field, and choose the name when it appears.
Delete Member from Group

1. In the Members part of User Group Settings: Click **Edit**.
2. Hover over the name of a user to delete, then click the X.

Delete Multiple Members from Group

1. In the Members part of User Group Settings: Click **Edit**.
2. Click the checkmark to display a checkbox next to every user.
3. Check the boxes of each user to be deleted (or use Select all), then click **Remove**.

![User selection interface](image)

- **Required permissions to add or delete parent groups:**
  - Simplified management: **Server administrator**
  - Detailed management:
    - **Modify details** for the currently selected user

**Activities**

This panel shows activities of all group members (and members of its child groups) across all projects.

*See Activities Panel.*

**Access**

*See Access Panel.*

Access panel is not available while using the **Simplified management** mode.

**Note:** **BIMcloud Basic** allows only **Simplified management**, thus the **Access** panel is never available.
Roles Page

Roles are a set of permissions, which describe what the owner of the role can do for specific element types or data types, both on the BIMcloud Manager or in ARCHICAD Teamwork projects. Thus, you can set up generic Roles and use them for any content type.

Use the Roles page to view and modify roles and their permissions. A Settings Panel is available for each selected Role. Use these controls to define permissions for a Role.

See Settings for details.

Use the Access panel of the BIMcloud items to grant a permission set (Role) to someone (User or Group) for a certain item (the one currently selected in the Navigator.)

Required permissions to view roles:
- Simplified management: Project or Server administrator
- Detailed management: View item permission (Traversing applies)

Topics in this section:
- Navigator
- Functions
- Settings
- Panels
Navigator

The Navigator displays the Role root plus the Roles. The roles are shown in list view only. There are no additional columns in expanded view.
Functions

Available functions for the Roles Page vary depending on what you have selected in the Navigator: Root or Role.

<table>
<thead>
<tr>
<th>Function</th>
<th>Root</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Role</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Duplicate</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Export</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Import</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Topics in this section:

- Create Role
- Duplicate Role
- Export Roles
- Import Roles
- Delete Roles
Create Role

Click Create Role from the plus sign next to the Roles root, or from the Root Summary. Enter a role Name.

Define its permissions by editing the checkboxes in the Settings panel.

Required permissions:
- Simplified management: Server administrator
- Detailed management: Modify folder content for Role root

Duplicate Role

Use this if you want to create a user with settings similar to those of an existing role.

Select the existing role, then click Duplicate from the Summary panel. Give the duplicate role a new name. Then adjust its settings in the Settings panel.

Required permissions:
- Simplified management: Server administrator
- Detailed management: Modify folder content for Role root

Export Roles

Use this function to transfer roles to a different BIMcloud, or to store user data for backup purposes. Select the role(s) you wish to export:

- To export all roles, click on the Roles root folder.
- To export a single or multiple users/groups, select them in the Navigator.

Note: To multi-select items in the Navigator, activate the checkboxes by clicking the checkmark at the top of the page.
• Click **Export**.

Data for all the roles you are exporting will be placed into a single file and downloaded into your browser’s default download folder, with extension `.BIMRoles`.

**Import Roles**

Click the **Plus** button on the Role root, or select the Role root and click **Import** from the available functions. Browse for a file containing the roles to import (with extension `.BIMRoles`).

The role file is imported to the BIMcloud Manager.

If the BIMcloud Manager already contains a role with the same name as an imported role, the imported role is renamed with a suffix (the existing role will not be overwritten).

**Required permissions:**

- Simplified management: **Server administrator**
- Detailed management: **Modify folder content** for Role root
Delete Roles

1. Select one or more roles to delete.  
   **Note:** To multi-select items in the Navigator, activate the checkboxes by clicking the checkmark at the top of the page.

2. Click Delete.  
   Confirm the Delete process in the upcoming dialog box.
   – Required permissions:
     • Simplified management: Server administrator
     • Detailed management: **Delete/Remove content** for Roles root
Panels

Available Panels on the Roles Page and their content vary depending on what is selected in the Navigator:

Roles Root

Settings

Roles root has no settings, this panel is empty.

Access

See Access Panel.

Access panel is not available while using the Simplified management mode.

Note: BIMcloud Basic allows only Simplified management, thus the Access panel is never available.

Role

Settings

A Settings Panel is available for each selected Role. Use these controls to define permissions for a Role.

Required permission:

- Simplified management: Server administrator
- Detailed management: Modify details
Permissions

Role Permissions are divided into seven categories: Management Permissions, and six groups of ARCHICAD Related Permissions. Click the category headers to expand/minimize the lists in each.

See Management Related Permissions and ARCHICAD Related Permissions for details.

Note: Management permissions are not available while using Simplified Management.

See Permission Management: Simplified and Detailed.

Edit Permissions for a Role

Click the Edit button to edit permissions for the currently selected role (e.g. Draftsman).

- Check/uncheck a box to add or remove permission from the role.
- Check/uncheck a category name to add/remove all permissions of that category at once.
Required permissions:
- Simplified management: Server administrator
- Detailed management: Modify details

For each permissions category, the checkboxes indicates the status of the included elements:
- Empty: no permissions are selected from that category
- Gray checkmark: some permissions are selected from that category
- Black checkmark: all permissions are selected from that category

Access

See Access Panel.

Access panel is not available while using the Simplified management mode.

Note: BIMcloud Basic allows only Simplified management, thus the Access panel is never available.
My Tags

Note: Not available in BIMcloud Basic.

Use tags in BIMcloud Manager to categorize and locate your Projects, Libraries and folders. For example, tag the two projects that you work on daily, then use search and filter to quickly display these projects in the navigator.

Tags are for personal use: no one else who accesses the BIMcloud will see the tags you are using. Tags are listed and managed on the My Tags page of BIMcloud Manager.

Required permissions to use Tags and to display My Tags page:

- Detailed management: Enable tags

Related Topics

My Tags Page
Add Tag to Item
Find Items by Tag
Remove Tag from Item
Edit/Delete Tag
My Tags Page

Use this page in BIMcloud Manager to manage your tags.

- Tags are listed in the Navigator in a flat list.
- For any selected Tag, the summary section provides relevant commands (described in the following sections).

Default Tag Set

The first time you open the My Tags page, you get the option to add five predefined Tags.

These are available for your convenience, but you do not have to add them or use them. You can create any number of tags in addition to the default set.
If your tag list is empty, you can create the Default tag set at any time using the command:
Add Tag to Item

Taggable items are all those listed on the BIMcloud Projects page: Projects, Libraries and their folders.

You can assign any number of tags to an item.

1. Open the Projects page of BIMcloud Manager.
2. Select one or more Projects, folders, or libraries.

3. From the summary section, click the Plus sign at My Tags:

4. The Add/Create Tag dialog appears. Do one of the following:
   - Start typing the name of an existing tag (e.g. “My Projects”) until the desired tag appears in the list below. Click to assign.
   - Click New tag to create a new one. (See also Create or Duplicate a Tag.)

The tag (e.g. “My Projects”) is now assigned to the selected project, folder or library item(s).
Tagged items get a tag icon in the Projects Navigator, and the tags are shown in the summary section:

Repeat to add any number of tags to the selected item(s).

Related Topics:
- Remove Tag from Item
- Find Items by Tag
Find Items by Tag

Do one of the following:

- **Search for Tag (Projects Page)**
- **Filter Items by Tag (Projects Page)**
- **Filter Items by Tag (My Tags)**

**Search for Tag (Projects Page)**

1. Open the Projects page of BIMcloud Manager.
2. Click the Search icon to open the search field and display the tags.
3. Click on a tag, or start typing the tag name (e.g. “To do”) to display it.
4. Click the tag you want. Add as many tags as needed to further filter the criteria.
5. The list is filtered to show all items with that tag.

**Add Search Term**
To add a search term (text and/or tag), type it in and click the Plus sign.

**Search by Text**
To search by just text (instead of tag), type in the text and press Enter.

Click x in the Search field to cancel the search and display all elements again.

**Filter Items by Tag (Projects Page)**
1. Open the Projects page of BIMcloud Manager.
2. Select an item.
3. In the summary section, click the tag you want to filter for, to open its drop-down menu.
4. Click **Filter Projects**.

5. The list is filtered to show all items with that tag.

**Filter Items by Tag (My Tags)**

1. Open the My Tags page of BIMcloud Manager.
2. Select the tag you want to filter for (e.g. “My Projects”).
3. From the summary section, click the “Tag used” line.

4. The Projects page opens: the list is now filtered to show all projects that use the tag.
Create or Duplicate a Tag

1. Open the My Tags page of BIMcloud Manager.
2. Do one of the following:
   - Click the plus sign from the My Tags root item
   - Click the Create Tag command
   - Select an existing tag, then choose Duplicate.
3. In the appearing dialog, enter the name of the new (or duplicate) tag. Each tag name must be unique.
4. Click one of the ten color buttons to use it for the new tag. You can re-use colors for any number of tags.

Note: You can also create a new Tag on the Projects page. See Add Tag to Item.

Related Topics:
Edit/Delete Tag
Remove Tag from Item
Add Tag to Item
Remove Tag from Item

1. Open the Projects page of BIMcloud Manager.
2. Select the item from the Navigator.
3. From the summary section, click the tag you want to remove.
4. Click **Remove Tag**.

**Related Topics:**

*Edit/Delete Tag*
**Edit/Delete Tag**

1. Open the My Tags page of BIMcloud Manager.
2. Select a tag to edit.

**To edit Tag name or color:**
- In Settings, click **Edit**.
- Modify the name and/or color, then click **Save**.

**To delete a Tag:**
Click **Delete** from the summary section.
This eliminates the tag entirely. The tag will be removed from all items that used it.

**Related Topics:**
- Find Items by Tag
- Remove Tag from Item
BIMcloud Servers Page

Servers are the hardware components of a BIMcloud: the BIMcloud Manager, and any number of BIMcloud Servers. These servers act together as a single BIMcloud.

Use the Servers page to view and modify servers and folders.

Required permissions to view servers and folders:
- Simplified management: Server administrator
- Detailed management: View item permission (Traversing applies)

Topics in this section:
- Navigator
- Functions
- Summary
- Panels
- BIMcloud Server/BIMcloud Manager Backups
Navigator

The Servers page lists the servers, organized into folders, to which you have access. It contains two server types:

- **BIMcloud Manager** (only one instance is possible)
- **BIMcloud Server**. Multiple BIMcloud Servers may be present.

You can use folders to organize these servers in any way you like, e.g. all servers located in the same office go into one folder.

View options

On the Servers page, the Navigator has two view options:

- **Tree view**: Hierarchy is displayed

- **List view**: All servers/folders are displayed in a list. Their location in the hierarchy is displayed in the second line of each item. This view type is easier to sort, because it omits the folder hierarchy.

Filters

The following filters are available to narrow down the items displayed in the Navigator:

- **All**: Display everything
- **Servers**: Display only the servers without the folders in a flat list
- **Folders**: Show only the folders
- **Running**: Show the currently running servers only
• **Stopped**: Show the currently stopped servers only

You can Focus on folders to limit the number of displayed items to its child elements only.

![Screenshot of BIMcloud Servers Page](image)

In a focused view, the items in the Filter pop-up will change and the filters will only apply to the focused branch of the hierarchy. Quit from focused view by selecting the Show All filter or clicking the **Focus** button on the focused item.

### Expanded View

![Screenshot of Expanded View](image)

In expanded view, the following columns are available:

- Version
- Status
- Free space
- Last activity
- Last backup
- Active users

Use these columns to quickly sort among your servers. Switch to flat list view to sort globally (otherwise it sorts within folders only).
Functions

Functions Available for Servers Folder

Available functions vary depending on what you have selected in the Navigator: the Servers Root, Folder, BIMcloud Manager, or a BIMcloud Server.

<table>
<thead>
<tr>
<th>Function</th>
<th>Root</th>
<th>Folder</th>
<th>BIMcloud Manager</th>
<th>BIMcloud Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Folder</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Move to folder</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Disconnect</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Each function is described below.
Create Folder

Creates a folder inside the currently selected folder. This function is available for the Server Root folder and any of the server folders.

Click **Create Folder** and enter the new folder name in the appearing dialog. Make sure the new folder name is unique within this folder.

The new folder will be automatically selected after creation.

- **Required permissions:**
  - Simplified management: **Server Administrator**
  - Detailed management:
    - Modify folder content
    - Modify details
Pair BIMcloud Server

Pairs the BIMcloud Manager with a newly installed BIMcloud Server.

**Note:** If you install a new BIMcloud Manager, and you then install a new BIMcloud Server immediately afterwards (as described at [Clean Installation](#)), the pairing process occurs automatically.

Use this function to ensure that the newly installed BIMcloud Server can communicate with the BIMcloud Manager. This involves copy-pasting the BIMcloud Manager’s public key (token) into the BIMcloud Server’s Configuration screen.

This function is available in the Server Root folder and any of the server folders.

1. Open the BIMcloud Manager web interface in a browser window.
2. Select the folder (Servers root or another server folder) where you wish to place the BIMcloud Server that is being paired.
3. Click the **Pair** command.

![BIMcloud Manager web interface showing the Pair command](image)
4. In the appearing dialog, click **Select Token**.

5. The text has been selected. Now copy this selected text to the Clipboard (e.g. using Ctrl + C).

6. Click **Next**.

7. Enter the URL of the BIMcloud Server (including the http:// or https:// prefix and the port number e.g.: `http://computer.com:1228`).

   Or select the name of a local server from the list.

8. Click **Next**. (If the URL is not working, fix the error.)

9. Add a name to your server. This name will be displayed in the Navigator and used in ARCHICAD when referring to it as a host server.
10. Paste the copied text to the BIMcloud Server’s configurator screen.
   Note: If the configuration is not currently in progress, you can access this screen here: go to the Tray application or the BIMcloud application folder, then use Configure BIMcloud Server.

11. The BIMcloud Server configuration interface appears. Click Next.

12. Use the Paste command (e.g. Ctrl + V) to paste the previously copied token into the Public Key input field, then restart the server.


14. Click Next.

15. On the final screen, click Finish.
   - The BIMcloud Server will automatically appear in the Navigator of the BIMcloud Manager.

Troubleshooting:
- Make sure the BIMcloud Server was successfully restarted
- Make sure you Copy/Pasted the correct public keys
- Make sure the BIMcloud Server’s URL you’ve entered is accessible from the BIMcloud Manager computer

Required permissions:
- Simple management: Server Administrator
- Detailed management:
  - Modify folder content
  - Modify details
Server Status (Running/Stop/Restart)

Shows the current running status of the selected Server. This control allows you to stop and restart the server. The function is available for any of the BIMcloud Servers.

The start and stop process might take some time, because first the Server will make sure all open connections are closed. The process will start when you click the function; you will be notified when the process is complete.

See Background Jobs.

Required permissions:

- Simplified management: Server Administrator
- Detailed management: Start/Stop server
Move to Server/Folder

Moves the selected item(s) to a new folder. This will also move the child item(s) of the selected folder. Click the function and pick a folder where to move the elements.

**Note:** The folder picker will contain all the folders you can see in the Navigator, but to select a folder as a destination, you must have permission to modify its content.

- **Required permissions:**
  - Simplified management: *Server Administrator*
  - Detailed management:
    - *Delete/Remove folder content* for the parent of the selected item
    - *Modify folder content* for the target folder
    - *Modify details* for the target folder
Disconnect BIMcloud Server

Disconnects the selected BIMcloud Server.
Click the function, confirm your decision. The BIMcloud Server will be disconnected. If you decide to reconnect it later, repeat the Pairing process.

See Pair BIMcloud Server.

**Important:** You must remove all hosted projects and libraries from the BIMcloud Server prior to disconnecting it.

★ Required permissions:
- Simplified management: Server Administrator
- Detailed management: Delete/Remove folder content for the parent folder
Delete Folder

Deletes the selected folder. This function is only available for folders. Click the command and confirm your decision.

**Important:** Only empty folders can be deleted.

**Required permissions:**

- Simplified management: Server Administrator
- Detailed management: Delete/Remove folder content for the parent folder
Summary

The summary section lists the most relevant information about the Server selected in the Navigator.

Some list items also function as a link to a page with more detailed information.

The available information varies depending on what is selected: The Servers root folder; other server folder; the BIMcloud Manager; and/or a BIMcloud Server.

<table>
<thead>
<tr>
<th>Description</th>
<th>Root</th>
<th>Folder</th>
<th>BIMcloud Manager</th>
<th>BIMcloud Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Servers</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Free project space</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

Server’s program version

Server’s status (running or stopped)

Number of servers

Number of projects on this server, and their sizes

Free space in the default project location of this server

Number of Libraries on this server, and their sizes
<table>
<thead>
<tr>
<th>Feature</th>
<th>Root</th>
<th>Folder</th>
<th>BIMcloud Manager</th>
<th>BIMcloud Server</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free data space</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>Free space in the default library location of this server</td>
</tr>
<tr>
<td>Free library space</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td>Free space in the default library location of this server</td>
</tr>
<tr>
<td>Active users</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Number of users currently online on this server (each user is only counted once)</td>
</tr>
<tr>
<td>Active projects</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Number of active projects</td>
</tr>
<tr>
<td>Last backup</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>CPU usage</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
<td>Current demand (percentage)</td>
</tr>
<tr>
<td>RAM usage</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
<td>Physical memory (GB) in use</td>
</tr>
</tbody>
</table>
Panels

The available Panels on the Servers page and their content vary depending on what is selected in the Navigator:

- Server Root
- Server Folder
- BIMcloud Manager Server
- BIMcloud Server
Server Root

The Server root acts as a folder.

Settings

The Server root has no special settings. This panel is empty.

Activities

This panel shows activities of all users on all projects.

See Activities Panel.

Access

See Access Panel.

Access panel is not available while using the Simplified management mode.
Server Folder

Settings

Name of the BIMcloud Server.

Required permissions:

- Simplified management: Server Administrator
- Detailed management: Modify details

Hosted Projects

This panel displays all the projects hosted on all the BIMcloud Servers contained in this folder. See Hosted Projects/Libraries for available functions.

Hosted Libraries

This panel displays all the libraries hosted on all the BIMcloud Servers contained in this folder. See Hosted Projects/Libraries for available functions.

Activities

Activities of all users on the projects hosted on selected servers. See Activities Panel.

Access

See Access Panel.

Access panel is not available while using the Simplified management mode.
BIMcloud Manager Server

Settings

Status Section

This section contains information on
- **Version**: program version of the BIMcloud Manager
- **Host computer**: The name of the computer on which the Manager is installed
- **Installation folder** path of the BIMcloud Manager
- **Warnings** (if any) related to the BIMcloud Manager
- **Notification of Available Updates** (if any).
– To enable check for updates, turn on this option in the General Settings section (below)

**General Settings Section**

Click Edit to modify data in this section.

![General settings interface]

**Required permissions:**
- Simplified management: Server Administrator
- Detailed management: Modify details

**BIMcloud Name:** You will see this name in the top-left corner of the web interface. ARCHICAD users will see this name in the BIMcloud Server pop-ups and in the Tray Icon application.

**Management roles** *(See Permission Management: Simplified and Detailed)*:
- Simplified
- Detailed

**Company logo:** Optionally, load a company logo to your BIMcloud’s login page. Click Choose File to browse for the desired image file.

**Public Key:** The BIMcloud Manager’s public key. The public key cannot be modified.

**Check for update(s):** Turn this feature on to enable BIMcloud to communicate with GRAPHISOFT servers to check for
- available Update(s),
- status of BIMcloud (running or stopped),
- available License Update(s)

**Required permissions:**
- Simplified management: Server Administrator
- Detailed management: Manage Licenses on BIMcloud Manager
**Connection Settings**

Configure the addresses ARCHICAD can use to connect to the Server.

- **Primary address** (required): This address uniquely identifies the server. The BIMcloud Manager uses this address to access the server.
- **Alternative addresses and lookup order** (optional): ARCHICAD will select the most suitable one to connect

*See Connection Settings to learn more about how to set up connections.*

BIMcloud Manager automatically tests the addresses while entering them and provides feedback about the result.

You can also enter a non-working address, because it might work from a different location. Changes cannot be saved if one of the entered addresses points to a different BIMcloud.

If you want to add the server computer’s current IP address or computer name to the list, click **Show current addresses** and pick one of the addresses.

Adjust the lookup order of the addresses using the up/down arrows. Use the delete icon to remove an address or the refresh icon to test it again.

**Required permissions:**
- Simplified management: **Server Administrator**
- Detailed management: **Modify details**

**Email Preferences**

Configure the email server which will allow you to send notifications and password reminders.

- **SMTP server**: address of your SMTP server
- **SMTP server port**
- **Connection Security**: Select the security level your server requires
- **From address**: Emails will be sent using this email address
• **Server requires authentication**: Check if a username and password are necessary to access the server

• **User**: Authenticate as this user

• **Password**: Use this password for the above user

  🔄 **Required permissions:**
  - Simplified management: **Server Administrator**
  - Detailed management: **Modify details**

**Custom User Fields Section**

Fields entered here will be available on all users’ settings to enter additional, server-wide information. (E.g. Skype address, Office where the user is located.)

- **Add new**: Click this button to add a new field and enter its name

- **Remove**: Removes the field from here and from all users’ settings panels. Data entered into this field by users will be lost.

  🔄 **Required permissions:**
  - Simplified management: **Server Administrator**
  - Detailed management: **Modify details**
BIMcloud Manager - LDAP Panel

The BIMcloud Manager is able to connect to one or more Directory Services and import users/groups from that server - all of them, or just a selection.

To keep the user/group information up to date, it is possible to set up regular and automatic synchronization with the Directory Services.

The LDAP Panel contains a list of the currently connected Directory Services. Use this panel to add/remove Directory Services, or to modify the settings and imported data for already existing ones.

Connect to New Service

Click Connect to new service to bring up the Connection Panel.

Steps to set up a connection:

1. Create connection.
2. Set up the parameter mapping.
3. Filter the users and groups to be imported.
4. Modify the synchronization schedule.

Required permissions:
- Simplified management: Server administrator
- Detailed management: Modify details

Each step is detailed below.
Step 1: Create Connection

This step will establish the connection to the directory service.
Enter the following parameters (all parameters are required unless marked as optional):

- **Name**: Enter a name for this directory service for easier identification. You will see this name in the list of the directory services, and users/groups will reference the directory service by this name.
- **Server address**: The address of the directory service
- Use SSL Connection.
- **Port**: Port of the directory service.
- **User** (optional): Authenticate with this user during connection. No authentication is used when left empty.
- **Password** (optional): Use this password for authentication.
- **Base DN** (optional): An LDAP search criterion used to narrow down the imported users/groups.

After you have entered the parameters, push the **Test connection** button. If you get any error message, correct the parameters and/or make sure the server address is accessible from the BIMcloud Manager computer.
Step 2: Set Up Parameter Mapping

The directory service will contain a large number of objects and parameters, so it is important to narrow down the imported elements. Because of the various setup options, even those directory services can be configured in different ways which use the same service engine.

We provide two built-in configuration schemes, which will work with the default settings, but it is likely that you will have to fine-tune their mapping parameters:

- Active Directory
- Open LDAP

Use the Directory type pop-up to enter the basic values of the selected service type (either Active Directory or Open LDAP).
Click the **Preview** button to see the result of the mapping and import. If you do not see the expected entries, then you must fine-tune the queries and mapping options.

<table>
<thead>
<tr>
<th>Name</th>
<th>User name</th>
<th>Email</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Csaba Mondics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Csaba Nemeth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Csaba Szentgyorgyi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Csilla Mai</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Csilla Mikos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custom Solutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daniel Farago</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daniel Ferenc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daniel Serly</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Queries: the LDAP objects passing these queries will be handled as users and groups:

- **User query**: All items which will pass through this LDAP query will be handled as users
- **Group query**: All items which will pass through this LDAP query will be handled as groups. Enter the names of the LDAP parameters to map them to the BIMcloud’s user parameters. All parameters are required unless marked as optional.

Mapping: select the parameters of the objects passing the queries and map them to BIMcloud user parameters:

- **Group ID**: unique ID for groups
- **Group name**: Name of group
- **Members**: comma-separated list of group members
- **User ID**: unique ID for users
- **Login name**: login name for the user
- **Parents**: comma-separated list of parents
- **Full name**: you can combine two LDAP parameters into a single user name (the second field is optional)
- **Email address**: email address of user
- **Prefix for user/group names** (optional): Prefix the name of all imported users and groups to avoid duplicate names

Click the **Preview** button to open a list and see the result of the Parameter mapping. If there is an error in the mapping process and some of the required fields remain empty, then those entries can’t be imported to the BIMcloud Manager. The rest of the items will be automatically imported during the first Synchronization.
Click **Save** to finalize the Directory Service connection settings.

**Step 3: Filter Users and Groups to be Imported**

If you do not wish to import all the users and groups who pass through the connection filter, then you can fine-tune the import process and select them individually or based on groups.

In the Filter users section, click **Edit**, and switch the Filter to “Import selected users and groups.”

Click the **Select users and groups** button and mark the users and groups you wish to import.

**Note:** Only those users are listed here for which the parameter mapping created a valid result.

Click **OK** to close the selection dialog.

If you wish to automatically import all members of the selected groups (rather than selecting them one by one), activate the “Automatically include group members” checkbox.

Click **Save** to store your changes.

**Step 4: Synchronization**

**Manual Synchronization**

Click the **Sync** button in the Filter users section to synchronize the directory service for the first time.

The synchronization process will start in the background. You can review the process status on the Server Messages dropdown at the top-left of the page.

You will be notified once the process is complete.
Set Up Regular Synchronization

It is a good practice to set up regular synchronization for the directory service to make sure all settings are always up to date: new users added and obsolete users removed from the BIMcloud.

In the Filter users section, activate the checkbox “Regularly sync with Directory service”, then enter the interval in minutes. Click **Save** to store your changes.

Review Synchronization Results

The result of the automatic synchronization is logged. To review this log, select the directory service from the list and click the **Details** button. You will find the Sync history in the bottom section of the panel.

Modify a Directory Service Connection

If something changes in the connection settings or you modify the filtering, select the directory service from the list and click the **Details** button.

Edit the required section and click **Save** again.

If the number of the imported users changes and some of them are removed because of the modifications, a confirmation dialog will pop up about how to handle removed users. You can decide between two options:

- **Remove them from BIMcloud**: Removed users will be forced to leave their existing projects and all their unsent changes will be lost. (They can still save a Solo PLN from their local data folder on their local computer.)
  
  See [Force Leave User](#).

- **Keep them as BIMcloud users**: Removed users will be kept on the user list.

Disconnect from a Directory Service

Select the Directory service from the list and click **Disconnect**. The above described confirmation dialog will appear again.
Troubleshoot Connection
If there is an error in the synchronization, the process stops automatically and logs the error event into the sync history. The sync history also lists the errors that must be fixed in order to sync again. Users with View Item permission for the BIMcloud Manager will receive a warning about the synchronization error when they Log in to BIMcloud Manager.

Required permissions for all Directory Service functions:
- Simplified management: Server Administrator
- Detailed management: Modify details for BIMcloud manager
BIMcloud Manager - Licenses Panel

Note: In BIMcloud Basic, no User License is required. The Licenses Panel lists the BIMcloud version you are using.

The Licenses panel gives an overview about the currently used, available and missing BIMcloud User Licenses.

Each user working on the BIMcloud requires one BIMcloud User License, regardless of how many projects the user is working on. A license is automatically assigned to the user when he/she joins a Teamwork project in ARCHICAD.

The BIMcloud User License remains automatically reserved until the user closes ARCHICAD, or goes offline for any reason.

Once he/she opens the project again, a license is again automatically reserved for use. If there are no more available BIMcloud User Licenses, then the user can only work offline. See The BIMcloud User License for more information.

If a License update is available, a Notification appears.

Note: To receive this Notification, you must turn on Check for Updates. Do this on the Servers page of BIMcloud Manager (Settings Panel/General Settings).

The list shows how these Licenses are currently used. Select the list row of the user to manage his/her licenses. The following functions are available:

Assign license(s)

Assigns a license to the user manually. This remains permanently assigned to the user even after he/she closes all projects on the BIMcloud or goes offline.

Required permissions:
- Simplified management: Server Administrator
- Detailed management: Manage licenses

Revoke license(s)

An Administrator can revoke a manually assigned license. Select the list row of the user and click the Revoke button. If available, an automatic license is then assigned.
Required permissions:
- Simplified management: Server Administrator
- Detailed management: Manage licenses

View License Details

Click the Details button to view additional license details, including:
- Source of the licenses (e.g. name of license server)
- Number of licenses available/in current use
- Type of license (e.g. FULL, EDU)
- Expiry date
BIMcloud Manager - Backups Panel

- Available only on BIMcloud 21 and later.
- Not available in BIMcloud Basic.

Use this panel to schedule and manage backups of the BIMcloud Server or BIMcloud Manager.

Required permissions:

- Simplified management: Server Administrator
- Detailed management: Modify details

For details, see BIMcloud Server/BIMcloud Manager Backups.

Activities

This panel shows activities of all users on projects hosted by the selected BIMcloud Manager.

See Activities Panel.

Access

See Access Panel.

Note: Access panel is not available while using the Simplified management mode.
BIMcloud Server

Settings

Shows the settings of the selected BIMcloud Server.

Status Section

Status: Indicates the current status of the BIMcloud Server:
- Running (Everything is OK)
- Stopped (The server is accessible, but the service is not running)
- Not Accessible (The server is not accessible)

- **Version**: Program version of the BIMcloud Server
- **Host computer**: The name of the computer on which the Server is installed
- **Installation folder** path of the BIMcloud Server
- **Warnings** (if any) related to the BIMcloud Server

⚠️ Required permissions to start/stop server:
- Simplified management: **Server Administrator**
- Detailed management: **Start/Stop server**
General Settings Section

Name of the BIMcloud Server.

Required permissions:
• Simplified management: Server Administrator
• Detailed management: Modify details

Connection settings

Configure the addresses ARCHICAD can use to connect to the Server.

• Primary address (required): This address uniquely identifies the server.
• Alternative addresses and lookup order (optional): ARCHICAD will select the most suitable one to connect to.

See Connection Settings to learn more about how to set up connections.

BIMcloud Manager automatically tests the addresses while entering them and provides feedback about the result.

You can also enter a non-working address, because it might work from a different location. Changes cannot be saved if one of the entered addresses points to a different BIMcloud.

In case you wish to add the server computer’s current IP address or computer name to the list, click Show current addresses and pick one of the addresses.

Adjust the lookup order of the addresses using the up/down arrows. Use the delete icon to remove an address or the refresh icon to test it again.

Required permissions:
• Simplified management: Server Administrator
• Detailed management: Modify details
Hosted Projects

This panel displays all the projects hosted on the currently selected BIMcloud Server.

See Hosted Projects/Libraries for available functions.

Hosted Libraries

This panel displays all the libraries hosted on the currently selected BIMcloud Server.

See Hosted Projects/Libraries for available functions.

Backups

Note: Available only on BIMcloud Server 21 and later.

Use this panel to schedule and manage BIMcloud Server backups.

Required permissions:

- Simplified management: Server Administrator
- Detailed management: Modify details

For details, see BIMcloud Server/BIMcloud Manager Backups.
Activities
This panel shows activities of all users on projects hosted by the selected BIMcloud Server. 
See Activities Panel.

Access
See Access Panel.
Access panel is not available while using the Simplified management mode.
BIMcloud Server/BIMcloud Manager Backups

Notes:
- Available only for BIMcloud Server and BIMcloud Manager (version 21 or later)
- Not available in BIMcloud Basic.

Enable BIMcloud Backups At Server Configuration

The Backup function for BIMcloud Server and/or BIMcloud Manager is enabled only if:
- you check the Create Server Backup box during the Configuration process, and
- you define a path for Server Backup Content during the Configuration process.

See BIMcloud Manager Configuration and BIMcloud Server Configuration.

Topics in this Section:

How to Schedule or Create a Server Backup
How to Restore a Backup for BIMcloud Server or Manager
New Backups Created After the Restore Process
Where are the Server Backup Files Located?
How to Schedule or Create a Server Backup

Use the controls on this panel to schedule, create and manage Backups of Servers on the BIMcloud (BIMcloud Manager and BIMcloud Servers).

BIMcloud Server Backups include all Teamwork data: Projects, Libraries, and their snapshots; Activity Log, mail and Server configuration information.

BIMcloud Manager Backups include all the above data, and also includes Folders, Users and Roles.

Note: Server monitoring data (e.g. CPU, memory usage) are not included in the backup.

Only one copy of each Backup type (BIMcloud Manager and BIMcloud Server) is retained at a time. If a Backup process is unsuccessful, the last saved Backup version is retained until a new Backup is created to replace it.

Backup Schedule Section

Click Edit to choose a schedule for server backups:

• Don't Create: No backup will be created
• Hourly: The backup will be created every certain number of hours, based on the settings you provide
• Daily: The backup will be created at a set time every certain number of days, based on the settings you provide.

Click Save to save changes.
Required permissions to modify schedule:
- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item

Backups Section
This section provides information about the status of the last backup. If errors occurred during the last backup, then those errors will be noted.

Create Backup
Click Create to backup the server at any time, regardless of any scheduled backup. The Last Backup Status field shows you that the backup is underway. If an error has occurred, this field will note the problem.

Required permissions to work with existing backups:
- Simplified management: Project or Server administrator
- Detailed management: Modify details for the selected item
How to Restore a Backup for BIMcloud Server or Manager

Restoring a Server Backup becomes necessary if, for example, one or more server computer(s) malfunction and you have to reinstall the BIMcloud Server and/or BIMcloud Manager. You must restore the backup files for each reinstalled Server/BIMcloud Manager separately. You can only restore data for servers that have saved Backups.

*See the section above: How to Schedule or Create a Server Backup.*

To restore a Server Back up file, follow these steps:

1. As needed, uninstall the corrupted BIMcloud Server components from the machine.
2. Reinstall the BIMcloud Server and/or BIMcloud Manager.

**Notes about new BIMcloud installation:**
- Make sure new installations are of the same version and Build number as the original installations! This is necessary in order to read the Backup files. In case of build/version discrepancy, you will get a warning telling you which Build you need to install.
- If possible, use the same address and port settings for the new BIMcloud Server as for its original installation. (This way, the BIMcloud Manager can locate the newly installed Servers automatically.)
- The new installations do not have to use the same Project data and Library data paths as the previous BIMcloud installations.
3. Click the BIMcloud tray icon.
4. Click the name of the component whose data you wish to restore: BIMcloud Server or BIMcloud Manager.
5. From its popup menu, choose **Restore from Backup.**

![Restore from Backup](image)

6. In the appearing dialog, browse for the Backup file you need.

- Server Backups of BIMcloud Server have the extension “bcsb”.
- Server Backups of BIMcloud Manager have the extension “bcmb”.

![Restore from Backup Tool](image)
The Backup location was defined by you when you configured the BIMcloud Server or Manager. If you can’t remember the backup folder location, see the next section: Where are the Server Backup Files Located?

7. Click Restore.

8. Review the appearing dialog to check the name, creation date, size and version of the chosen Backup file.

- Also restore server settings (Recommended): By default, this option is checked, and recommended. It means that you will restore not only the Teamwork projects and libraries, but also the port settings, keys, and configuration information of the originally installed BIMcloud Server/Manager.
  - Activating this checkbox is especially important if you are restoring only one Server component: this way, the other components will automatically locate the restored component.

9. Click Restore. The Server data are restored, and the Server will start up.

10. If you restored a BIMcloud Server, the appearing dialog reminds you to check that the new BIMcloud Server’s primary address is accessible by the BIMcloud Manager.

If the reinstalled BIMcloud Server has a different primary address than before (i.e. it’s on a different computer), you must add this address information manually:

- Go to BIMcloud Manager
- Go to the Servers page
- Select the BIMcloud Server you reinstalled
- On the Settings panel, go to Connection and enter the primary address of the reinstalled BIMcloud Server.

Note: Even if you have entered the new primary address, it is a good idea to add the previous primary address as an alternative (provided it is not in use by another computer). This way, you will not have to re-link external content and libraries manually.

Once you have finished Server Backup Restore, you can start working again.

**New Backups Created After the Restore Process**

If the BIMcloud Server settings include a scheduled Backup or if you create a new Backup:

Old (pre-Restore) Backup files will be deleted as soon as a new Backup is created, if the Backup path remains the same as before.
Where are the Server Backup Files Located?

Server Backup files are saved to the location(s) you specified in the Configuration process, when you installed the BIMcloud Server and BIMcloud Manager.

See BIMcloud Manager Configuration and BIMcloud Server Configuration.

To check these locations, locate the BIMcloud Server’s tray icon. Right-click, then find the component you need and click Configure from the available commands.
Hosted Projects/Libraries

The Projects and Libraries panels are available for each selected Server, on the Servers page of BIMcloud Manager.

Missing projects/libraries section

If the BIMcloud Manager refers to a project on a Server, but it is not there, then the project/library is listed in the Missing projects or Missing libraries section.
Columns in expanded layout:

- **Name**: Name and path of the project/library. If the data is unused, then it displays the last known name and path of the data
- **Last active**: Last time the data was accessed
- **Joined users**: Number of currently joined users in a project

Available functions:

- **Delete**: Removes the project from the BIMcloud Manager
- **Link to hosted project**: The project/library can be re-linked to an Unused project/library hosted on the current or any other Server

The BIMcloud Manager and the BIMcloud Server are separate programs. A project/library that is listed in the Navigator of the BIMcloud Manager must have a linked project or library data available on the Server as well. Also, the reverse is also true: data hosted on the Server must be linked to a project/library entity on the Manager.

Sometimes the two components will become out of sync (e.g. one of the components was restored from a snapshot).

Depending on which component was rolled back, two kind of errors are possible:

- **Missing project/library**: A project/library exists on the BIMcloud Manager (it is visible in the Project Navigator), but the data it refers to on the host Server is missing
- **Unused project/library**: project/library data exists on the Server, but the BIMcloud Manager does not know about it and does not have a matching entry in the project/library Navigator

### Hosted projects/libraries section

![Hosted projects](image)

All projects/libraries hosted by the current Server are listed in this table, even if they are not used by the Manager. The status column shows whether the hosted data is linked and actively used by the Manager. If the Status is Unused, then the Manager does not have any project/library which uses this data.

**Columns in Expanded Layout:**

- **Name**: Name and path of the project/library. If the data is unused, then it displays the last known name and path of the data
- **Version**: Version of the ARCHICAD project
- **Status**: OK / Unused, depending on whether the project/library is linked by the Manager
- **Last activity**: Last time the data was accessed
- **Last backup**
- **Active users**: Number of currently joined users in a project
Available commands for selected Project/Library

- **Delete**: Deletes the project/library
- **Load as new project/library**: Only available for Unused projects/libraries. Creates a new project/library on the Manager from the hosted data.
- **Link to existing project/library**: Only available for Unused projects/libraries. Links the data to a Missing project/library.
Use the Access panels to provide users with permission to view or modify data in the BIMcloud Manager and in ARCHICAD Teamwork projects.

This table summarizes the pages of BIMcloud Manager where the Access Panel is available. Except on the Projects page, you must always be in Detailed Management Mode in order to see the Access Panel.

<table>
<thead>
<tr>
<th>Content Type in BIMcloud Manager</th>
<th>BIMcloud</th>
<th>BIMcloud Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
<tr>
<td>User Groups</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
<tr>
<td>User Folders</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
<tr>
<td>Servers</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
<tr>
<td>Roles</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
<tr>
<td>Projects</td>
<td>Simplified or Detailed Management</td>
<td>Project or Server Administrator Permission Required</td>
</tr>
<tr>
<td>Project Folders</td>
<td>Detailed Management Mode required</td>
<td>No Access Panel</td>
</tr>
</tbody>
</table>

See *Permission Management: Simplified and Detailed*.

- Required permissions to view Access panels:
  - Simplified management:
    - Projects: **Project or Server administrator**
    - Other pages: Access panel not available
  - Detailed management: **View access** for the selected item (Users, Servers, Roles)

- Required permissions to modify data on Access panels:
  - Simplified management:
    - Projects: **Project or Server administrator**
  - Detailed management: **Modify access** for the selected item

**Topics in this section:**

*Access Panel View Modes*

*Granting Access*

*Users Without Access*
Revoke Access
Permission Management: Simplified and Detailed
Troubleshooting: Permissions Deadlock
List of Permissions
Access Panel View Modes

The Access panel has three view modes:

- **Compact View**
- **Summarize by Users**
- **Permissions View (Details)**

**Compact View**

To switch between Compact View and Summarize by Users, use the View pop-up above the list.

Compact view lists the granted accesses as they were defined. The list is divided into two parts: the upper part shows the access definitions created locally, while the bottom part shows the access definitions inherited from parent elements. (The bottom part of the list is visible only when there are inherited access definitions.)

**Columns**

- User/group name
- Assigned role(s)
  - If a role is an inherited role, then you can hover the cursor over it to see the source of the inherited role.

Select an item from the list and click Details to see and/or customize the included permissions. 

*See Permissions View (Details).*
Summarize by Users

To switch between Compact View and Summarize by Users, use the View pop-up above the list.

Permissions might be granted to users and groups on many different levels. This makes it difficult to understand a user’s permissions set for the selected content item. In this case, use the Summarize by Users view to unfold all the groups and summarize all permissions at all levels.

In this view, all groups are unfolded: only the users are listed together with their role (or roles). Hover over a specific role to see where it has been inherited from.

Columns

- User name
- Assigned role(s)
  - If a role is an inherited role, then you can hover the cursor over it to see where the role was granted.

Select an item from the list and click Details to see and/or customize the included permissions. 
See Permissions View (Details).
Permissions View (Details)

Switch to Permissions view in the Access panel by selecting an item in the list and clicking the Info icon.

This view unfolds the roles and summarizes the permissions granted to the clicked user or group.

Permissions allow the user to perform a specific operation. Permissions can have three statuses:

- Not granted: Empty checkbox
- Granted: Checked checkbox
- Granted, but revoked: Checkbox with red X mark

The permissions are listed in rows; and the roles are shown in columns. The column headers indicate where and how that role was assigned to the selected user/group.

The Summary column shows the aggregated permission set for the selected user/group.

Edit Permissions

Click **Edit** on the header to make the Custom role appear.
(The Custom role column is the only place where you can revoke a permission.)

<table>
<thead>
<tr>
<th>Summary</th>
<th>Custom</th>
<th>Full access</th>
<th>Viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Enable/Disable user</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Delete/Remove folder content</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Lock/Unlock project</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Manage licenses</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Modify access</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Modify content</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Modify default role</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Modify details</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Modify hosted data on BIMcloud server</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Start/Stop server</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>View access</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>View item</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>

- Click once in the checkbox to **activate the permission** (with a checkmark)
- Click a second time in the checkbox to **revoke the permission** (with a red X).

The result of the editing is immediately shown in the Summary column. Click **Save** to store your changes.

**Related topic:**

- Granting Access
- Revoke Access
Granting Access

An access definition has three elements:

- **Which** item is accessible by
- **Whom**, and
- **What** can he/she do with it

*Note:* This kind of access definition, known as ACL (Access Control List), is widely used in the IT industry. ACL specifies which users are granted access to content items, as well as which permissions are allowed for a given content item.

To grant access to content items on the BIMcloud, follow these three steps:

1. Select the item in the Navigator.
2. Open the Access panel and start to type the name of who can access it. A pop-up will help to pick an existing user or group. To grant access to all users, use the special Everyone group.
3. Choose a role for the selected user or group – this defines what role he/she will have for the selected item. Each role includes a set of permissions.

For more information, see Roles Available when Granting Access.
If multiple content items are selected in the Navigator, then the Access panel will not list the already existing access definitions to these items. You can still grant new accesses: they will be applied to all of the selected content items for which you have Modify Access permission.

You can modify a user’s permission for a specific content item by defining a Custom role for that particular item.

See Permissions View (Details).

Related Topics:

Roles Available when Granting Access
Inheritance of Access Rights
Traversing
Permissions and Dependence
Revoke Access
Roles Available when Granting Access

Default Role

Each user can have a default role defined in their user settings. (A default role is optional.)

When defining access, if you choose the user’s default role (which is the automatically selected option), then this access will change along with the default role of the user: that is, if someone modifies the default role of the user, this access definition will automatically be modified accordingly.

If a group is granted access using the default role, then each group member brings his/her own default role.
Generic Roles

Generic roles are listed on the Roles page. They can be used anywhere for any content items. If a generic role changes, then all accesses granted using this role will be updated, and the permissions change accordingly.

Custom Role

Sometimes it is easier to grant certain permissions locally to someone for a content item, without saving this permission set as a new generic role. In this case, when granting Access, select Custom from the pop-up, then click Save.

The permissions page will automatically open and you will be able to pick the necessary permissions as part of a custom role for the selected user/group. Click Save to store your changes.
See Permissions View (Details).
Inheritance of Access Rights

An important feature of the Access definition is its inheritance: Access granted at a higher level of the folder hierarchy is **inherited downwards by all of its child elements**.

The final permission set for a user for the content item is an aggregate of all roles which have been assigned to him/her (or to a group in which he is a member). If a permission has been revoked, then it cannot be re-granted again at a lower level in a hierarchy.
Traversing

If a user’s role includes View item permission for a content item, then he/she must be able to find this content item in the Navigator in order to work with it - even if the user does not have View item permission for the parent folders (including the Root folder) of the content item.

Traversing ensures that users will be always able to access all content items for which they have View item permission - even if they do not have permission to access the parent folders.

In this case, the parent folders, including the Root (which would otherwise be hidden from the user) will be visible in the Navigator and the user can traverse through them, but no additional information will be displayed about that parent folder even if the user selects it.

If access to the content item is revoked from the user, these traversed parent folders will automatically disappear too.

**Note:** Traversing works for all content types, even those without multi-level hierarchies (Roles and users).

**Example:**

- Hierarchy in Navigator:
  - Folder A
  - Project A
- **User A** has been granted View item permission for **Project A**, but does not have any permission for **Folder A**.
- **Folder A** will be still visible in the Navigator for **User A** to allow traversing through it, but no additional information will be displayed about **Folder A**.
Permissions and Dependence

Some permissions apply only to a very specific content type on the BIMcloud (e.g. Start/Stop Server is only applicable to the Servers content type). If a specific permission does not make sense for a content type where it has been granted, then it simply has no effect.

Certain permissions will only be effective if another permission is also granted.

Examples:

- **View Item** permission is superior to all other permissions. If a user does not have **View Item** permissions, then the other permissions related to that item will not be effective, since the user cannot find the item in the BIMcloud Manager.

- **View Access** permission is superior to the **Modify Access** permission. The Access panel of an item will only appear if the **View Access** permission is also granted. Without seeing the Access panel, it is not possible to edit anything on it.
Users Without Access

If a requested page is not accessible to the user, a warning message appears. (For example, if the user receives an URL for a project, but he does not have access to that project.)

Internal links between content items (e.g. a link from a user's page to a project he is currently Joined in to) are only active if the user has access to that Project as well. Otherwise the link will not work and a warning pop-up will appear.
Revoke Access

To revoke a user’s access to content item from a user, open the content item’s Access panel, hover over the user you would like to remove, and click **Delete**.

However, if the user has been granted access as a member of a group, then it is not possible to revoke the individual user’s access. The solution is to assign the user a Custom role, and then revoke specific permissions:

1. Start to type the name of the user and pick the name from the pop-up list.

2. Select **Custom role** from the Role pop-up.

3. Click **Save**.

The permissions view for the selected user will open immediately: revoke any permissions by clicking in the box to create a red X.

**Important hint:** To revoke all permissions, it is enough to uncheck the **View item** permission box in the Custom column. From that point on, the user will not be able to see the current content item at all. Consequently, the user cannot exercise any other existing permissions either.

*See Permissions and Dependence.*

Similarly, if access has been granted to a user on a content item at a higher level in the hierarchy, then it can be revoked at a lower level only by assigning a Custom role to the user.

**Note:** You can revoke a specific permission only if you can do so at the level that the permission was first granted. That is, if a permission was granted to a user as a result of inheritance from a higher level, you cannot revoke that permission unless you can also access and modify the higher level.

**Example:**

- Hierarchy in Navigator:
  - Folder A
- Folder B

- Access granted to Folder A:
  - User A – full access
  - User B – no access

- User A grants User B full access to Folder B

If User B would like to revoke User A’s access to Folder B, he cannot do so, because he has no permissions to Folder A, where User A’s access was originally granted. Thus, User B cannot block User A from Folder B.

If a permission has been revoked, then it cannot be re-granted again at a lower level in a hierarchy. (Revoking is final.)
Permission Management: Simplified and Detailed

Note: BIMcloud Basic allows only Simplified management.

BIMcloud offers two different permission management modes:

- Simplified management
- Detailed management

Switch between these modes at Servers, on the BIMcloud Manager's Settings panel:

Simplified Management

Simplified management divides all users into three groups.

In BIMcloud Manager, go to the Users page. For each selected user, the Personal settings section of the Settings panel contains a Management role pop-up, where the management role is selected:

- Server Administrator
- Project Administrator
• Not set

Based on this Management role, the user will be granted access to items on the BIMcloud according to the following rules:

<table>
<thead>
<tr>
<th></th>
<th>Server Administrator</th>
<th>Project Administrator</th>
<th>Not set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects</td>
<td>Full access</td>
<td>Full access</td>
<td>View all projects for which he/she has been added to the Access panel, with any Role</td>
</tr>
<tr>
<td>Users</td>
<td>Full access</td>
<td>View only</td>
<td></td>
</tr>
<tr>
<td>Roles</td>
<td>Full access</td>
<td>View only</td>
<td></td>
</tr>
<tr>
<td>Servers</td>
<td>Full access</td>
<td>View only</td>
<td></td>
</tr>
<tr>
<td>ARCHICAD projects</td>
<td>According to granted permissions</td>
<td>According to granted permissions</td>
<td>According to granted permissions</td>
</tr>
</tbody>
</table>

**Detailed Management**

Each content item on the BIMcloud has its own Access panel. Users can view/modify the selected item according to the permissions they were granted on these panels.

**What Happens When You Change to Detailed Mode?**

All existing access permissions will be retained; all users can continue work without further interruption.

Two new User Groups appear on the Users page:
• Project Administrators
• Server Administrators

The existing Project and Server Administrators are added to these groups.

Two new roles are created on the Roles page:
• Full access (Contains all permissions)
• View only (Contains View item permission only)

The following accesses will be automatically granted to these two new groups on the root level of all content types:

<table>
<thead>
<tr>
<th></th>
<th>Server Administrator</th>
<th>Project Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects root</td>
<td>Full access</td>
<td>Full access</td>
</tr>
<tr>
<td>Users root</td>
<td>Full access</td>
<td>View only</td>
</tr>
<tr>
<td>Roles root</td>
<td>Full access</td>
<td>View only</td>
</tr>
<tr>
<td>Servers root</td>
<td>Full access</td>
<td>View only</td>
</tr>
</tbody>
</table>

Due to the inheritance of the permissions, these new permissions will apply to all items under the root. You will be able to fine-tune all permissions from now on, for each and every content item.
Troubleshooting: Permissions Deadlock

In case of a system deadlock (e.g. permissions were revoked from all managers and no one is able to control the server), use the Master Administrator user to solve the problem.

The Master Administrator user is a built-in user. It is not possible to delete it, and it always has full access to the whole server. The Master Administrator does not appear on the user lists.

The login name for the Master Administrator is: masteradmin. The password was defined during the server installation in the BIMcloud Manager configurator. If you have forgotten the password, then re-run the BIMcloud Manager Configurator and define a new password.

Note: it is not recommended to use the Master Administrator user for everyday management tasks. Use it only in case of emergency.
List of Permissions

Topics in this section:

Management Related Permissions
ARCHICAD Related Permissions
Management Related Permissions

These permissions enable a user to view or modify data on the BIMcloud Manager while using the Detailed management mode.

**Note:** BIMcloud Basic allows only Simplified management without inheritance, thus these permissions are not available.

**View Item**
- User can view all settings related to the item, except
  - Access Panel - which also requires View Access permission
  - Activities Panel - which also requires View Activities permission
- If the item is a Project, a user with View Item permission can Open or Join the project from ARCHICAD

**View Activities**
- User can view the item's Activities panel (View Item permission also required)

**Modify Details**
- User can modify all settings related to this item (except Access settings)
- User must also have View item permission in order to carry out modifications

**View Access**
- User can view the item's Access settings (View Item permission also required)

**Modify Access**
- User can modify all Access settings related to the item
- User must also have View Access (and View Item) permissions in order to carry out modifications

**Modify Folder Content (Applicable to All Folders, Including All Root Folders)**
- User can create new folders within the folder. (Modify Details permission for the folder is also required)
- User can assign a new BIMcloud Server to the folder (using the Pair process)
- User can Share a project that is inside the folder
- User must also have View item permission for the folder in order to carry out the above functions
Delete/Remove Folder Content (Applicable to All Folders, Including All Root Folders)

- User can delete items (folders, projects, users, groups, roles) within the folder
- User can disconnect BIMcloud Server located within the folder
- User must also have View item permission for the folder in order to carry out the above functions

Enable Tags

- Use tags and view the My Tags page of BIMcloud Manager

Enable/Disable User (Applicable to Users)

- User can enable or disable a user
- User must also have View item permission in order to carry out the above functions

Lock/Unlock Project (Applicable to a Particular Project)

- User can lock or unlock the project
- User must also have View item permission for the project in order to carry out the above functions

Start/Stop Server (Applicable to a Particular Server)

- User can start or stop the server
- User must also have View item permission for the server in order to carry out the above functions

Modify Hosted Data on BIMcloud Server (Applicable to a Particular BIMcloud Server)

- User can assign this BIMcloud Server as the default server of a Project folder
  
  See Settings for a selected Project folder.
- User must also have View item permission for this server in order to carry out the above functions

Manage BIMcloud Manager Licenses

Applicable to a particular user and to the BIMcloud Manager's Licenses panel.

- User can assign or revoke Licenses for the user
- User can modify the settings (add/revoke/upgrade) of the BIMcloud Manager's Licenses panel
- User must also have View item permission for the user or server in order to carry out the above functions
ARCHICAD Related Permissions

These permissions enable an ARCHICAD user to create, delete/modify, and/or manage particular data types in Teamwork projects using ARCHICAD.

The following are the predefined permissions for Teamwork projects. Most are self-explanatory. In this table, we have added a brief explanation where warranted.

<table>
<thead>
<tr>
<th>ARCHICAD Related Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARCHICAD Navigator</strong></td>
</tr>
<tr>
<td>Layouts and Subsets - Create</td>
</tr>
<tr>
<td>Layouts and Subsets - Delete/Modify</td>
</tr>
<tr>
<td>Master layouts - Create</td>
</tr>
<tr>
<td>Master layouts - Delete/Modify</td>
</tr>
<tr>
<td>Publisher Sets - Create</td>
</tr>
<tr>
<td>Publisher Sets - Delete/Modify</td>
</tr>
<tr>
<td>Publisher Sets - Publish</td>
</tr>
<tr>
<td>Issues – Manage</td>
</tr>
<tr>
<td>Enables you to create a new Issue, to include or remove Layouts in the Issue, to edit the data of an open Issue or delete an open Issue, and to close an Issue.</td>
</tr>
<tr>
<td>Issues – Modify History</td>
</tr>
<tr>
<td>Enables you to reopen a closed Issue and to revise the data (name, ID) of a closed Issue.</td>
</tr>
<tr>
<td>Schedules and Indexes - Create</td>
</tr>
<tr>
<td>Schedules and Indexes - Delete/Modify</td>
</tr>
<tr>
<td>Set Up List Schemes - Manage</td>
</tr>
<tr>
<td>Story - Create</td>
</tr>
<tr>
<td>Enables you to create a new story using Navigator context menu or the Story Settings dialog box, provided you have reserved that dialog box.</td>
</tr>
<tr>
<td>Not associated with the “Viewpoint - Manage” permission.</td>
</tr>
<tr>
<td>Story - Delete/Modify</td>
</tr>
<tr>
<td>Not associated with the “Viewpoint - Manage” permission.</td>
</tr>
<tr>
<td>Viewpoint - Manage</td>
</tr>
<tr>
<td>Enables user to create, modify and delete source markers and independent markers (e.g. markers which create a new viewpoint). If you do not have this right, you can only place linked-type Section/Elevation/IE and Detail/Worksheet markers.</td>
</tr>
<tr>
<td>Views and Folders - Create</td>
</tr>
<tr>
<td>Views and Folders - Delete/Modify</td>
</tr>
<tr>
<td>ARCHICAD Related Permissions</td>
</tr>
<tr>
<td>------------------------------</td>
</tr>
<tr>
<td><strong>ARCHICAD - Attributes</strong></td>
</tr>
<tr>
<td>Building Materials - Create</td>
</tr>
<tr>
<td>Building Materials - Delete/Modify</td>
</tr>
<tr>
<td>Cities - Create</td>
</tr>
<tr>
<td>Cities - Delete/Modify</td>
</tr>
<tr>
<td>Composites - Create</td>
</tr>
<tr>
<td>Composites - Delete/Modify</td>
</tr>
<tr>
<td>Fill types - Create</td>
</tr>
<tr>
<td>Fill types - Delete/Modify</td>
</tr>
<tr>
<td>Layers/Layer Combinations - Create</td>
</tr>
<tr>
<td>Layers/Layer Combinations - Delete/Modify</td>
</tr>
<tr>
<td>Line types - Create</td>
</tr>
<tr>
<td>Line types - Delete/Modify</td>
</tr>
<tr>
<td>MEP System - Create</td>
</tr>
<tr>
<td>MEP System - Delete/Modify</td>
</tr>
<tr>
<td>Markup styles - Create</td>
</tr>
<tr>
<td>Markup styles - Delete/Modify</td>
</tr>
<tr>
<td>Surfaces - Create</td>
</tr>
<tr>
<td>Surfaces - Delete/Modify</td>
</tr>
<tr>
<td>Operation Profile - Create</td>
</tr>
<tr>
<td>Operation Profile - Delete/Modify</td>
</tr>
<tr>
<td>Pen sets - Create</td>
</tr>
<tr>
<td>Pen sets - Delete/Modify</td>
</tr>
<tr>
<td>Profiles - Create</td>
</tr>
<tr>
<td>Profiles - Delete/Modify</td>
</tr>
<tr>
<td>Renovation Override Styles - Manage (in AC projects up to v19)</td>
</tr>
<tr>
<td>Zone categories - Create</td>
</tr>
<tr>
<td>Zone categories - Delete/Modify</td>
</tr>
<tr>
<td><strong>ARCHICAD - Tools</strong></td>
</tr>
<tr>
<td>Design Tool Elements</td>
</tr>
<tr>
<td>All ARCHICAD tools listed in the Design Tools sub-menu</td>
</tr>
<tr>
<td>Document Tool Elements</td>
</tr>
<tr>
<td>All ARCHICAD tools listed in the Documenting Tools sub-menu</td>
</tr>
<tr>
<td>Grid tool elements</td>
</tr>
<tr>
<td>ARCHICAD Related Permissions</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>ARCHICAD - More</strong></td>
</tr>
<tr>
<td>3D Styles - Create</td>
</tr>
<tr>
<td>3D Styles - Delete/Modify</td>
</tr>
<tr>
<td>Element Transfer Settings - Create</td>
</tr>
<tr>
<td>Element Transfer Settings - Delete/Modify</td>
</tr>
<tr>
<td>Favorites - Create</td>
</tr>
<tr>
<td>Favorites - Delete/Modify</td>
</tr>
<tr>
<td>Graphic Overrides - Create</td>
</tr>
<tr>
<td>Graphic Overrides - Delete/Modify</td>
</tr>
<tr>
<td>IFC Translators - Manage</td>
</tr>
<tr>
<td>Markup Entry - Create</td>
</tr>
<tr>
<td>Markup Entry - Delete/Modify</td>
</tr>
<tr>
<td>Model view options - Create</td>
</tr>
<tr>
<td>Model view options - Delete/Modify</td>
</tr>
<tr>
<td>PLN Snapshot - Use computer for creation</td>
</tr>
<tr>
<td>Enables PLN snapshots (scheduled in BIMcloud Manager) to be run on this user’s computer.</td>
</tr>
<tr>
<td>Classification and Properties - Create</td>
</tr>
<tr>
<td>Classification and Properties - Delete/Modify</td>
</tr>
<tr>
<td>Public Find/Select criteria - Create</td>
</tr>
<tr>
<td>Public Find/Select criteria - Delete/Modify</td>
</tr>
<tr>
<td>Rendering scene - Create</td>
</tr>
<tr>
<td>Rendering scene - Delete/Modify</td>
</tr>
<tr>
<td>Renovation Filter - Create</td>
</tr>
<tr>
<td>Renovation Filter - Delete/Modify</td>
</tr>
<tr>
<td>Change - Create</td>
</tr>
<tr>
<td>Change – Delete/Modify</td>
</tr>
<tr>
<td>Save as PLN/PLA/TPL, MOD, GSM</td>
</tr>
<tr>
<td>Save as DXF/DWG</td>
</tr>
<tr>
<td>Save as IFC</td>
</tr>
<tr>
<td>Update to later ARCHICAD build</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ARCHICAD - Details, Info</strong></th>
<th>Project Info</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project Location</td>
</tr>
<tr>
<td></td>
<td>Project Notes</td>
</tr>
<tr>
<td></td>
<td>Project Preferences</td>
</tr>
<tr>
<td></td>
<td>Project Preview</td>
</tr>
</tbody>
</table>
| ARCHICAD - External Content | Add-ons setup - Manage  
Enables user to load/unload the project’s Add-ons as listed in the Add-On Manager |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|                             | External Drawings - Manage  
Enables user to place drawings from an external source and to link placed drawings to an external source. |
|                             | Hotlink Instances  
Enables user to reserve, modify or delete instances of placed hotlink modules. Enables user to place additional instances of project’s existing hotlinks.  
Does not enable user to manage hotlinks of the project. |
|                             | Hotlink and XREF - Manage  
Enables user to add new hotlinks to the project, and to perform all commands in the Hotlink Manager. Enables user to attach XREFs and to manage XREF sources in the XREF Manager. |
|                             | IFC Project Manager - Manage  
Enables user to reserve and modify data (project, building, site, IfcGroup, IfcZone properties) in the IFC Project Manager dialog box (File > Interoperability > IFC Project Manager). Element-level Ifc Properties can be edited in IFC Manager only for elements which are not reserved by another user.  
**Note:** No permission is needed to edit IFC properties of elements in their Settings dialog box, if you have reserved the elements. |
| Libraries - Add/Remove: Enables user to add BIMcloud Libraries to the project using the Library Manager. (Does not enable user to manage server libraries - that requires permissions on the BIMcloud Manager.) |
| Library Part - Create |
| Library Part - Delete/Modify |
| XREF instances  
Enables user to reserve, modify or delete XREF instances. Enables user to attach additional instances of project’s existing XREFs.  
Does not enable user to manage XREFs of the project. |
Activities Panel

The Activities panel lists data related to user activities on the BIMcloud. The Activities panel is available for:

- Projects, Project folders
- Users, Groups
- Servers, Server folders

The available filters and columns vary depending on the content type. For Servers only, a graphical Activity Monitor is available. (See Server Activities Monitor.)

Filter Activities Data

- **Choose Activity Type**: Choose one or more activity types to display feedback. (Or choose All types.) If there was a comment attached to the activity, then it will be displayed in the second line of this column.
- **Size**: Filter the activities by the size of the data event. (Or choose All sizes.)
- **User**: Choose a user from the list to display his/her activities only. (Or choose All users.)
- **Project**: Choose a project from the list to display related activities only. (Or choose All projects.)
- **Range**: Limit the displayed activities to the Last 50; or to activities in the last day or last hour only.
  - Use From/To dates to narrow the display of events by date.
- **Search**: Type any text to search for.

**Load more/Load all**: If the list does not contain all the possible elements, use the Load more or Load all buttons at the bottom to expand the list.

If a filter has been set, that column name is shown in blue for easier identification. To cancel a filter, select All from its options again.

Click the **Export** button to download all displayed entries in CSV format into your browser’s download folder.
Server Activities Monitor

Available on the Servers page, for a selected BIMcloud Server.

**Note:** Not available in **BIMcloud Basic**.

- **Select Chart:** Check the data items you want to view (CPU and RAM usage are checked by default.)
- **Select Range:** Choose a time interval from the pop-up menu at top right. (“Now” refers to the past one hour.)

The selected data types are now shown in graphical format in the chart, and as values at the top of the chart.
If any data item’s usage runs into the High range, it is shown in red:

- Hover the cursor over any point on the graph see those data for a specific point in time.
- Zoom in or out (or use the plus/minus buttons) on the chart as needed.

**Refresh List**

Server Activities are listed below the chart.

To list only activities that occurred during the time range shown on the chart, click **Refresh List**.

Required permissions to view Activities panels:

- **Simplified management:**
  - Servers: **Server Administrator**
  - Users, Projects: **Project or Server administrator**
- **Detailed management:** **View Activities**
Notifications

Notifications (warnings or info items) alert you to issues related to the functioning of the BIMcloud servers.

When enabled, Notifications appear automatically:

• in the Notifications dropdown (bell icon) on any page of BIMcloud Manager
• in the Notifications Dashboard (a separate page of BIMcloud Manager)
• as pop-ups, in a relevant location of the BIMcloud Manager web interface
• by email

Notifications are designed to be context sensitive. For example, where appropriate, you can click in the message to automatically navigate to the right page of BIMcloud Manager, where you can view and/or fix the particular issue.

A User will see only those Notifications that are relevant, based on his/her User Role and permissions.

Topics in this section:

Turn Notifications On/Off
Notification Types: Warnings and Info
View Dropdown List of Notifications
Notification Pop-Ups
Resolve the Issue
Go to Notifications Dashboard
Dashboard Interface
Delete Notifications
List of Notifications

Turn Notifications On/Off

Set up Notifications preferences for each User at User Settings (Notifications section).

• Display in BIMcloud Manager (this is On by default).
• Enable the option to receive a daily email listing the current Notifications for your BIMcloud Manager

See Notifications Section.

Notification Types: Warnings and Info

Warning notifications require urgent action in order for work to continue:

• For example: Server not accessible; Licenses due to expire within a week; Backup failed; Critically high CPU/RAM usage.

Warning notifications use an icon with an exclamation point.
Info notifications are for situations that do not require immediate attention. Work can continue, at least in the short term.

- For example: Update available; Licenses due to expire within a month; LDAP sync failed.

Info notifications use the familiar Information icon.

**Warning-Type and Info-Type Notification**

**View Dropdown List of Notifications**

The Notifications dropdown, with the full list of current Notifications, is available from the top left corner of every page of BIMcloud Manager.

**Notification Pop-Ups**

You will also see Notifications in pop-ups at the relevant parts of BIMcloud Manager:

Click on a pop-up to get more information and navigate to the Dashboard.
Resolve the Issue

Notifications are designed to be context sensitive, and to allow you to easily navigate to the right page of BIMcloud Manager or other resource, so you can view and/or fix the issue.

For example:

1. The Notifications dropdown indicates an available License update.

2. Click **Details** to open the Dashboard.

3. In the Dashboard, the Notification tells you to go to License Manager Tool and update your license.

Go to Notifications Dashboard

The Notification Dashboard lists the currently active notifications for the BIMcloud. To access the Dashboard, do one of the following:

- Click on the “Dashboard” content type from the BIMcloud Home screen (visible to Server Administrators only)
- Click on **Details**, next to any item of the Notifications dropdown list
- Use **Go to Notification Dashboard**, at the bottom of the Notifications dropdown list
- Click the Notifications pop-up arrow from the BIMcloud Home screen
Go to Notification Dashboard

Dashboard Interface

View the list of current Notifications (Warnings and Information).

You can filter the list by Notification type:

Each item provides help on what you can do to resolve the issue.

For any item, click the arrow to automatically open the page of BIMcloud Manager or other location, where you can view or fix the issue as needed.
Delete Notifications

Some Notifications in the list disappear on their own when the issue is resolved (Auto delete). Other Notifications remain until you delete them manually (Manual delete).

For info on how each Notification type is deleted, see List of Notifications.

To delete a Notification:
1. Hover over the Notification in either the Dashboard or the Notifications Dropdown.
2. The trash bin icon appears at left. Click to delete.
# List of Notifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Notification</th>
<th>Permissions required to see the Notification</th>
<th>How to Delete¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>![i]</td>
<td>License Update(s) Available</td>
<td>Server Admin, Manage Licenses for BIMcloud Manager</td>
<td>Auto</td>
</tr>
<tr>
<td>![i]</td>
<td>Server Update(s) Available</td>
<td>Server Admin, View and Modify Server</td>
<td>Auto</td>
</tr>
<tr>
<td>![i]</td>
<td>Server Activities - CPU or RAM usage</td>
<td>Server Admin, View and Modify Server</td>
<td>Manual</td>
</tr>
<tr>
<td>![i]</td>
<td>Insufficient Licenses (User cannot join a project because no license is available)</td>
<td>Server Admin, Manage Licenses</td>
<td>Manual</td>
</tr>
<tr>
<td>![i]</td>
<td>License About to Expire</td>
<td>Server Admin, Manage Licenses</td>
<td>Manual</td>
</tr>
<tr>
<td>![⚠]</td>
<td>Import Project/Library Failed</td>
<td>User who initiated the Import</td>
<td>Auto</td>
</tr>
<tr>
<td>![⚠]</td>
<td>Change Host Failed</td>
<td>User who initiated the Change Host</td>
<td>Manual</td>
</tr>
<tr>
<td>![⚠]</td>
<td>Server Backup Failed</td>
<td>Server Admin, User who initiated the Backup (for immediate backups only)</td>
<td>View and Modify Server, User who initiated the Backup (for immediate backups only)</td>
</tr>
<tr>
<td>![⚠]</td>
<td>Project/Library Snapshot Failed</td>
<td>Server Admin, Project Admin</td>
<td>View and Modify Project, User who initiated the Snapshot</td>
</tr>
<tr>
<td>![⚠]</td>
<td>LDAP Sync Failed</td>
<td>Server Admin</td>
<td>View and Modify Project, User who initiated the LDAP sync process</td>
</tr>
</tbody>
</table>

1. “Auto” delete: This Notification type disappears on its own when the issue is resolved. “Manual” delete: This Notification type remains visible until you delete it manually. See also Delete Notifications.
Connection Settings

BIMcloud offers a very flexible method to set up and establish the connection between the different components. The identification of the BIMcloud component, and the address used to access it, are completely separated. This allows the users to use different addresses to connect to the same server and at the same time maintain the internal project links (even if it was added using a different address).

It is possible to prepare the server for all possible connections in advance and set up the different addresses centrally. This ensures that ARCHICAD users will not have to worry about how to connect, because the Server Administrator has set up everything. If the connection was not configured in all details on the server in advance, then the users are also able to add alternative addresses and connect using a custom address.

Terms

• **Primary address:** This is the unique identification of the server, set up by the person installing the BIMcloud.
• **Alternative addresses:** Predefined alternative addresses defined on the server, which can be used to connect to this server as well.
• **Local addresses:** Alternative address entered by the user in ARCHICAD.
• **Automatic address:** Automatic addresses are generated automatically based on the active address.
• **Fallback:** ARCHICAD is not able to communicate with the BIMcloud Server, so it uses the BIMcloud Manager as a bridge to connect.
• **Lookup order:** Priority-based list of all available addresses. ARCHICAD picks the active address from this list
• **Active address:** The address currently used by ARCHICAD to connect to the BIMcloud Manager.
• **Automatic/Manual address selection:** The method ARCHICAD uses to pick the Active address.

Primary address

This is the unique identification of the server, set up by the person installing the BIMcloud. There is only one primary address for each BIMcloud component.

ARCHICAD uses this address to uniquely identify the server – even if it is communicating using a different address at the moment. This addresses is also used when placing references to the server (e.g. placing a hotlinked module from a Teamwork project).
When ARCHICAD opens a project which contains a reference to a BIMcloud not yet known by ARCHICAD, then ARCHICAD will use the primary address stored in the hotlink reference to find the server:

- If the address is working, then ARCHICAD will download all the alternative addresses and pick the most suitable one based on priorities.
- If the address is not working, then it will prompt the user to enter a currently working address to the new server. Once a working address is entered, ARCHICAD will download the list of alternative addresses based on the pre-defined priorities.

Set up the Primary address on the Settings panel of each BIMcloud component.

It is recommended not to change the Primary address of the BIMcloud. In case it must be changed, it is a good practice to add the old Primary address to the list of alternative addresses – even if it is not working any more. This ensures that ARCHICAD will be able to identify links placed by the old Primary address and keep the references alive in projects.

**Alternative addresses**

The list of alternative addresses is a ‘menu’ for ARCHICAD. It will go through this list in a certain order *(see Lookup order)* and connect to the server using the first functioning one.

Alternative addresses can be pre-set on the BIMcloud Manager for every server component.

**Automatic address**

Automatic addresses are available for BIMcloud Servers. Automatic addresses are not absolute addresses, but rather relative addresses. They are able to dynamically create an address based on the currently used address of the BIMcloud Manager. An example:

- ARCHICAD uses the [http://server-computer:1228](http://server-computer:1228) address to connect to the server

The Automatic address is [protocol://host:1229](protocol://host:1229)

ARCHICAD will automatically use [http://server-computer:1229](http://server-computer:1229) to connect to the Server.

The user goes home and uses a different address to connect to the server through the internet: [https://bimcloud.company.com:1228](https://bimcloud.company.com:1228)

ARCHICAD will automatically use [https://bimcloud.company.com:1229](https://bimcloud.company.com:1229) to connect to the Server.

There are two automatic fields to generate automatic addresses:

- ‘$protocol’: the protocol part of the url; in the above example, this is ‘http’ and ‘https’
- ‘$host’: the address part of the url without the protocol and the port. In the above example, this is: ‘server-computer’ and ‘bimcloud.company.com’
Fallback

In case ARCHICAD is not able to directly communicate with a BIMcloud Server, yet the BIMcloud Manager is accessible, then it will use the BIMcloud Manager as a ‘bridge’ to the BIMcloud Server and send all traffic through it. (Keep in mind that this kind of communication can affect the overall performance of BIMcloud, depending on the locations of the different components.)

Fallback communication might be a good choice when accessing the BIMcloud from outside the office, because it requires the IT administrator to open only one port on the company firewall.

Lookup order

When ARCHICAD tries to connect to a BIMcloud, it will go through the addresses in a certain order. This order can be set on the BIMcloud Manager. Alternative addresses added locally from ARCHICAD will always be at the end of the lookup order.

Automatic / Manual address selection

It is possible to override the address selected automatically by ARCHICAD, and force it to use a specific address instead. Use ARCHICAD’s Network Diagnostic tool to override the automatically selected address. Keep in mind that manually selecting an address might force ARCHICAD into an offline state even if there is a different – currently working – alternative address available.

Connection Process

ARCHICAD goes through the following steps when it connects to a BIMcloud.

When Adding a New BIMcloud Server:

When the user adds a new server to the server list, ARCHICAD asks for an address, a username and a matching password.

ARCHICAD connects to the BIMcloud Manager using the entered address and:

- Downloads its primary address and stores it as a unique identifier for this new server
- Downloads the list of alternative addresses and the lookup order
- Automatically selects the most suitable address based on the lookup order

When re-connecting to a currently offline server:

When ARCHICAD detects that the selected server is offline, the user will be able to start ARCHICAD’s Network Diagnostic tool and enter a new alternative address for the server. ARCHICAD will remember this alternative address in the future and use it in the lookup order when trying to connect to this server.

When connecting to an unknown server referenced from a hotlink module or a library:

Hotlink modules and Linked libraries contain the Primary address of their server in the reference. When ARCHICAD is about to check their status, it will use this Primary Address to identify the server.

- If this server is already known by ARCHICAD (it is available on its server list), then it will go through the regular connection process and pick the most suitable address automatically.
• If the server is not known yet, but the stored Primary Address is working, then it will automatically download the additional connection details and pick the most suitable address automatically.

• If the server is not known yet and the link does not work either, then ARCHICAD will prompt the user to enter a working alternative address to the server. Once a working address is entered, it will download the additional connection details and pick the most suitable address automatically.

**Best Practice**

Setting up multiple alternative addresses on the BIMcloud ensures that:

• ARCHICAD users will not have to worry about how the ARCHICAD connects to the BIMcloud; the IT administrator sets everything up

• The connection will always be optimal

Direct connection between the components is always the most effective way of communication. Any extra routes or processing will only increase the transfer time:

• http proxy servers: data is always tunneled through a common server and then forwarded to the relevant component

• https security: data is always encoded and decoded

• fallback communication: data is tunneled through BIMcloud Manager

The best practice for setting up addresses and the lookup order is to start with the most effective way of communication and then add the less effective ones:

2. Direct connection with a computer name: [http://server-computer:1228](http://server-computer:1228)
4. Connection through a secure connection: [https://bimcloud.company.com:1228](https://bimcloud.company.com:1228)

ARCHICAD will automatically select the following addresses from the above list depending on its location:

• From the office it will pick either #1 or #2, because the computers are on the same LAN.

• From a branch office it will pick either #1, #2 or #3, depending on how the two LANs are connected.

• From a remote location with a simple internet connection it will always choose #4. It is the least effective method, but it automatically provides the highest level of security.

**Troubleshooting**

Use ARCHICAD’s built in Network Diagnostic tool to find and fix connection related errors.

The Network Diagnostic is accessible from all parts of the ARCHICAD interface at which you select and log in to a server, plus the Teamwork Palette, and the Work Environment Settings Network and Update page (if you have installed a Delta Cache Server with BIMcloud).

*See the Network Diagnostic section in the Collaboration chapter of the ARCHICAD Reference Guide.*
BIMcloud Tray Icon

The BIMcloud tray icon is automatically installed on the server computer(s); it is always executed at system start. This application is the control center of all installed BIMcloud components.

View Tray Icon

The tray application’s color indicates the status of the running BIMclouds:

- Black/white: All components are running
- Yellow: One or more components are not running
- Red: None of the components is running

Note: If a server has been manually stopped in the BIMcloud Manager, the tray will still indicate that the server connection is OK.

Access BIMcloud Components from Tray Icon

Click the tray icon to access installed BIMcloud components and related commands. BIMclouds are differentiated by their names (the BIMcloud name shown at BIMcloud Manager - General Settings.)

- Paired BIMcloud components (Manager plus Server) are grouped accordingly.
- Unpaired Servers are listed separately.

- Color indicates status of the component(s): Green for running, red for stopped, yellow for mixed status
Access Commands for BIMcloud Component

Click a component to see its related commands:
# Index

## A
- Access Panels 207

## B
- BIMcloud Basic 14
- BIMcloud Manager 59
  - Access Panels 207
  - Activities 234
  - Background Jobs 72
  - Cloud Server Settings 178
  - Content types 62
  - Create Role 145
  - Custom Role 216
  - Disconnect BIMcloud Server 173
  - Duplicate Role 145
  - Export Roles 145
  - Group Members 139
  - LDAP Settings 184
  - Licenses Panel 191
  - Move Server 172
  - Navigator 64
  - Parent Groups 134
  - Password 136
  - Permissions Inheritance 218
  - Roles Page 142
  - Select Chart 235
  - Select Range 235
  - Servers Page 163
  - Settings Inheritance 73
  - Snapshots 98
  - Synchronization 188
- BIMcloud Manager Configuration 26
- BIMcloud Server Configuration 21
- BIMProject Backups 108
- BIMUsers 120

## C
- Change Host 85
- Check for update(s) 181
- Cloud Server Settings 178
- Compact view 209
- Compatibility Information 43
- Create User 116

## D
- Dashboard 239
- Defined manually from ARCHICAD 100
- Delete Users 122
- Delete Project 90
- Delta Cache 32
- Detailed Permissions 224
- Directory Services 184
- Disconnect BIMcloud Server 173
- Downgrade to BIMcloud Basic 48
- Duplicate Role 119
- Duplicate User 119
- Duplicate Project 83

## E
- Enable/Disable User 118
- Export Users 120

## F
- Force Leave 94, 127

## G
- GRAPHISOFT ID 31
- Group ID 187
- Group query 187

## I
- Import Users 121
- Import Project 86
- Install 15

## K
- Keep 41

## L
- LDAP 184
  - Disconnect service 189
  - Synchronization 188
- Licensing 42
- Lock / Unlock 81
Index

M
Move Project 84

N
Notification 237
Notification Dashboard 239

P
Pair BIMcloud Server 168
Permissions List 225
Permissions view 211
PLN Backup access right 108
PLN Project Backups 108

R
Rollback 109

S
Simplified Permissions 224
Snapshots 98
Summarize by Users 210

U
Update Components 35
Upgrade to BIMcloud 42, 47
User query 187