



Directory Synchronization Tool



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Introduction

Welcome to CyBlock Directory Agent. CyBlock Directory Agent is an easy-to-manage directory synchronization tool. It synchronizes your internal Active Directory data with CyBlock Cloud updating the groups and IDs information required by the cloud service. There is no need to manually recreate groups and IDs for your cloud service. You can import users at anytime or schedule an import and get an e-mail confirmation of the scheduled import.

Organization

The documentation is organized in the order that is recommended for setting up and using the CyBlock Directory Agent features and follows the menu structure.

User Management

This section shows you how to manage the import of Active Directory groups and IDs, create an Active Directory configuration, and import users from Active Directory. Instructions on how to change your password for your account can also be found here.

System Status

This section contains information on screens that are used to view jobs in the queue, the grouping structure of the imported groups and IDs, and communication messages between CyBlock products. Most of these screens are used for troubleshooting purposes.

Settings

This section contains instructions on how to create a secure connection (HTTPS) to your browser interface, restart the product service, and pair your CyBlock Directory Agent installation with your CyBlock Cloud accounts.

Help

This section briefly describes the Profiling page used with Technical Support, how to check for product updates, and how to accept and print the End User License Agreement.

Help and Contact Information

Help for the product is available in the product. Just click **Help** in the navigation bar at the top. The product Help window will then appear in which you can search for information.

Chat assistance is also available from Customer Service or Technical Support.

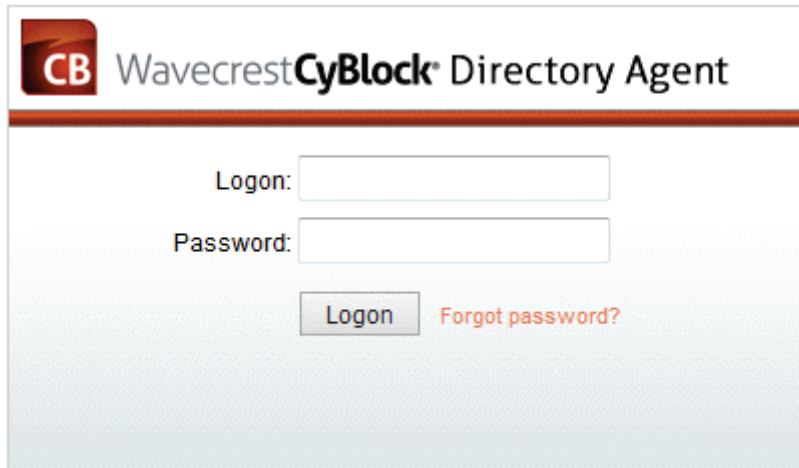
- In the product, click **Live Support** in the navigation bar at the top. The Wavecrest Live Support window opens. Enter your name and e-mail address. Select the department, type your message, and click **Start Chatting**.

If you ever need additional help beyond what is available in the manual or the product, please feel free to contact our Technical Support team.

Hours of Operation	8:00 a.m. and 6:00 p.m. ET, Monday through Friday
Toll-Free	877-442-9346, Ext. 4 (U.S. and Canada)
Direct	321-953-5351, Ext. 4
International	001-321-953-5351, Ext. 4 (outside U.S. and Canada)
E-Mail	support@wavecrest.net

Logon

1. Log on to the product using the following default credentials:
 - **Logon** - admin
 - **Password** - password
2. Click **Logon**. The [Change Your Password](#) page is displayed.
3. After changing your temporary password, log on with your new password.



The screenshot shows the login interface for Wavecrest CyBlock Directory Agent. At the top left is the logo, which consists of a red square with the letters 'CB' in white, followed by the text 'Wavecrest CyBlock Directory Agent'. Below the logo is a horizontal red line. The main area is light gray and contains two input fields: 'Logon:' followed by a text box, and 'Password:' followed by a text box. Below these fields is a 'Logon' button and a link labeled 'Forgot password?' in red text.

NOTE: If the Logon page does not appear, bring it up by going to **Start - All Programs - CyBlock Directory Agent - Browser Interface**.

Forgot Password

If you ever forget your password, click the **Forgot password?** link on the Logon page. The Reset Password page will be displayed.



The screenshot shows the 'Request Password Reset' page. The title 'Request Password Reset' is at the top left. Below it is the instruction 'Enter your logon to reset your password.' followed by a 'Logon:' label and a text input field. At the bottom left is a 'Submit' button.

Enter your logon and click **Submit**. Your password will be reset to the default, and you will need to change your password as described above.

User Management

Introduction

In User Management, you determine how you would like to import your Active Directory groups and IDs, create an Active Directory configuration, and import users from Active Directory either manually or through a scheduled import. In this section, you will also find instructions on how to change your logon password.

Manage Users

Before you begin importing groups and IDs, you must decide how they will be imported, that is, do you want to add only new group and ID information or replace all groups and IDs?

Add New Only (Default)

With this option, each time groups and IDs are imported, whether manually or scheduled from Active Directory, only new groups and IDs will be imported. (The new groups and IDs imported will be based on the selected groups in your [AD configuration](#).) Your existing groups and IDs will not be modified.

NOTE: If importing an ID that already exists in a group, that ID will be moved to the new group that is being imported. If the ID resides in the VIP group, it will not be moved.

Replace All

With this option, each time groups and IDs are imported, whether manually or scheduled from Active Directory, all groups and IDs will be updated to identically match that grouping structure. Any manual CyBlock Cloud changes to groups and IDs will be reversed.

1. To make your selection, go to **User Management - Import Users - Manage**.

Required Setup for Import

How will groups and IDs be imported?

Add New Only (Default)

Each time groups and IDs are imported, whether manually or scheduled from Active Directory, only new groups and IDs will be imported. Your existing groups and IDs will not be modified.

Replace All

Each time groups and IDs are imported, whether manually or scheduled from Active Directory, all groups and IDs will be updated to identically match that grouping structure. Any manual CyBlock Cloud groups and IDs changes will be reversed.

2. Select **Add New Only** or **Replace All**.
3. Click **Submit** to apply your change.

Active Directory Setup

If you have not completed the [Manage Users](#) section, do so first before getting started with importing groups and IDs. When you import from Active Directory, you have the option of creating a scheduled import to occur once every 24 hours.

1. To create an Active Directory configuration to be imported, go to **User Management - Import Users - Active Directory - Setup**.

The screenshot shows a window titled "Create or Modify Active Directory Configuration". It contains a "Select Configuration:" label followed by a dropdown menu set to "Create new configuration". Below this is an "Option:" label with a "Delete" button. At the bottom left, there is a "Next" button.

2. Leave the default selection set at *Create new configuration* and click **Next**.

NOTE: If you ever want to make changes to any of your configurations, use the drop-down arrow, select the configuration that you want to change, and click **Next**. Make your changes where needed. Make sure you go through the entire wizard to submit your changes.

3. Now you must configure the connection to your Directory Server.

The screenshot shows a window titled "Directory Setup". It has three input fields: "Directory Server:" with the value "server.company.com", "Login Distinguished Name:" with the value "DOMAIN\Administrator", and "Password:". Below these is an "Optional Setup" section with an "SSL Connection:" checkbox. At the bottom, there are "Back" and "Next" buttons.

4. Enter your appropriate information in the following fields: **Directory Server**, **Login Distinguished Name**, and **Password**.
5. To import from Active Directory using an SSL connection, select the **SSL Connection** check box.
6. Click **Next**.
7. Both **Connection Status** and **Authentication Status** indicators should appear green on the Active Directory Test Results screen. If both are green, click **Next**. If either status is red, click **Back** and double-check your Directory Setup settings.

The screenshot shows a window titled "Select Naming Context". It contains a "Valid Naming Contexts:" label followed by a dropdown menu set to "DC=Wavcave,DC=lan". At the bottom, there are "Back" and "Next" buttons.

8. Select the **Valid Naming Contexts** and click **Next**.

The screenshot shows a window titled "Type of Grouping". It has a "Group Type:" label followed by a list of radio button options: "Company", "Department", "Fields", "Manager", "OU", "Permission Group", and "No Grouping". The "Department" option is selected. At the bottom, there are "Back" and "Next" buttons.

9. Select the proper grouping type (such as Department or Manager) and click **Next**.

Select Groups

Use Groups:

- Department A
- Department B
- Department C
- Development
- HR/Accounting
- List
- Marketing
- Marketing and Sales
- Quality Assurance
- Sales
- Support/Technical
- Technical Support


Place all IDs from unhighlighted groups into "Ungrouped IDs"

10. If you selected **Fields**, you will see the Map Fields to Groups screen. Enter the name of each field. To add a new field, click the green plus icon.

Map Fields to Groups

Type in field names for group location.

Fields: Enterprise

L 

Place users that do not contain all configured fields into "Ungrouped IDs"

11. If you selected **Manager**, you will see the Manager Grouping Options screen where you can map the raw manager value to a different AD field that is more user-friendly.

Manager Grouping Options

If you wish to map the manager value to a different AD field (e.g., displayName or mail), enter desired field name below. Leave blank to keep raw manager value.

Mapped AD Field:

Create manager logon account for each manager

Place users that do not contain "manager" field into "Ungrouped IDs"

- For **Mapped AD Field**, type the AD field to map to. If the AD field does not exist, the distinguished name (DN) is used, that is, the raw manager value. Ensure that the AD field is unique; otherwise, the imported groups and IDs will not be properly assigned to the correct manager.
- To create a logon account for each manager, select **Create manager logon account for each manager**. When this option is selected and AD is imported, a job is submitted to the job queue, and the AD logon accounts are imported. Go to **User Management - Logon Accounts** to view the added accounts.

- If you want to place users that do not contain the Manager field into Ungrouped IDs, select **Place users that do not contain "manager" field into "Ungrouped IDs"**.
12. If you selected **Permission Group**, you will see the **Resolve for policy names** check box on the Select Groups screen.

NOTE: If you created blocking policies for your groups and IDs to import into, you **MUST** select the **Resolve for policy names** check box in order for your groups and IDs to import into the correct blocking policies that you created previously.

13. On the Select Groups screen, select the groups to be imported by clicking them, so they are highlighted. If you want to select multiple groups, hold down the CTRL key and click the groups you want imported.

NOTE 1: If you do not highlight any groups, all groups and IDs will be imported. This is the preferred option if you want all new groups and IDs imported with each import. Otherwise, only new IDs in your selected groups will be imported, and you will have to go back to your AD configuration to select any new groups so that they will also be included in the import.

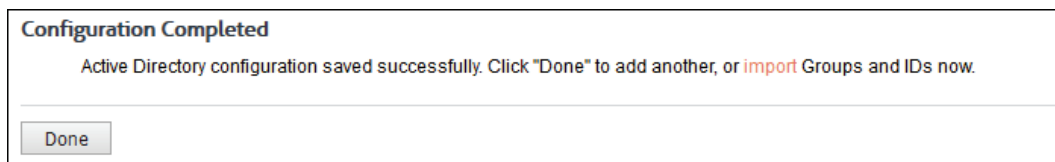
NOTE 2: If you want to place the users from the unhighlighted groups into Ungrouped IDs, select the **Place all IDs from unhighlighted groups into "Ungrouped IDs"** check box at the bottom of the screen. This option can be helpful, i.e., it will use the Ungrouped IDs group as a "holding tank" while you decide where to assign certain IDs.

CAUTION: If you select the check box and do not select any groups, all IDs will be placed in Ungrouped IDs. Also, if you select this check box, any IDs from the unhighlighted groups will be sent to Ungrouped IDs, which will not fall under your preconfigured blocking policies for the Permission Group selection.

14. Once you have selected the groups that you want to import, click **Next**.



15. In the **Name** field, type a name for this Active Directory configuration, and click **Next**.
16. You should see a successful configuration message. You now have the option to create another configuration by clicking **Done** or import groups by clicking the **import** link.



Import Users From Active Directory

This page allows you to import your Active Directory groups and IDs manually or schedule an import on an hourly basis or at a specific hour every 24 hours.

1. To import users from your Active Directory configurations, go to **User Management - Import Users - Active Directory - Import**.

Manually Import Active Directory

Import Groups and IDs:

Schedule Active Directory

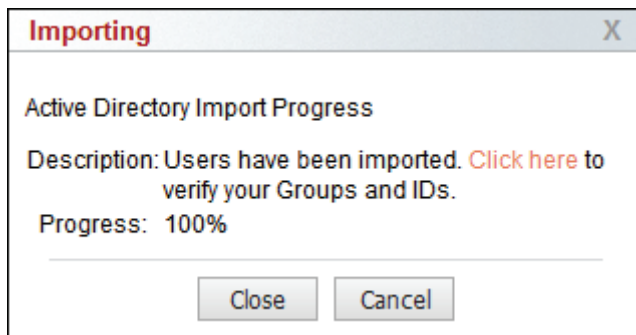
Automatic Update:

Frequency:

Hour:

E-Mail Confirmation:

2. To receive an e-mail confirmation of a manual import, make a selection in the **E-Mail Confirmation** field, and click **Submit**.
3. To import the groups and IDs manually, click **Start Import**. If your import is successful, you should receive the following message.



4. Click the link to view all of your imported groups and IDs, or close the window.
5. Every time you want to update your groups and IDs, you will need to click **Start Import** unless you schedule daily updates.
6. To schedule an import, in the **Automatic Update** field, select Yes. If you ever want to stop the scheduled import, you will need to return to this page and change the **Automatic Update** field to No.
7. In the **Frequency** field, select *Hourly* or *Specific Hour* if you want to schedule imports to occur every hour or at a certain hour respectively.
8. If you selected the Specific Hour option, in the **Hour** fields, select the specific hour and time of day that you want the import to occur every 24 hours. For both Hourly and Specific Hour options, the import will take place at the top of the hour.
9. In the **E-Mail Confirmation** field, select whether or not you wish to receive an e-mail for the import.
10. Click **Submit** to save your changes.

Change Your Password

This page allows you to update the password for your account. You are required to do this before using the product in order to change the temporary password assigned by the system. You may also use this page to change your password at any time.

1. Go to **User Management - Change Password**. The Change Your Password page is displayed with the Submit button disabled at this point.

Complete the Form to Change Your Password


Passwords must meet the following criteria:

- Contain at least 1 of the following special characters: !@#\$%^&*()
- Contain at least 1 uppercase and 1 lowercase letter
- Contain at least 1 number
- Be between 8 and 20 characters long
- New password must not match previous password

Old Password:

New Password: ✓

Confirm New Password: ✓

Password Strength: 

Weak Medium Strong

2. In the **Old Password** field, type the current password for the account.
3. In the **New Password** field, type the new password for the account. As you type the new password, a red x will display to the right of the field and change to a green check mark when the password criteria have been met. The password must meet the following criteria:
 - Contain at least 1 of the following special characters: !@#\$%^&*()
 - Contain at least 1 uppercase and 1 lowercase letter
 - Contain at least 1 number
 - Be between 8 and 20 characters long
 - Must not match previous password
4. In the **Confirm New Password** field, retype the new password to confirm it. As you type the password, a red x will display to the right of the field and change to a green check mark when the confirmation password matches the new password. The Submit button will also be enabled.
5. The **Password Strength** indicator evaluates your password's strength automatically and displays how strong your password is from *Weak* to *Strong*.
6. Click **Submit** to apply your change.

System Status

Job Queue

The Job Queue page displays a prioritized list of jobs in process. If there are no open jobs, when you go to the job queue, the page will be blank, and a message indicating the system is currently idle will appear. The job queue automatically assigns priorities and performs the jobs in a sequence that reflects those priorities.

The job queue runs one job at a time. A job that is running will always be at the top of the list, and a progress meter will show percent completion.

When a new job is initiated, the product automatically places it in the queue in accordance with its priority. Lower priority jobs are "bumped down" if appropriate.

1. To check the job queue, go to **System Status - Job Queue**.
2. You will see the list of jobs and their status on the page.
3. If you want to delete any of the jobs, click the red x icon. To delete all jobs in the queue, click the **Delete All** button.
4. To pause the queue from refreshing, click **Pause**.
NOTE: This does not pause the job from running.
5. Click **Restart** to get the queue refreshing itself again and to see the current status of job(s) running.

IPC Log

The Intra-Product Communication Log page displays the communication messages sent between your CyBlock products, for example, your local CyBlock Software or Appliance installation and CyBlock Cloud, or CyBlock Directory Agent and CyBlock Cloud. It is used by Technical Support for troubleshooting purposes.

1. To view messages, go to **System Status - Messages - IPC**.
2. If you have more than one cloud account, in the **Directory Agent Configuration** field, select the configuration for the messages that you want to view.
3. To expand long messages, click the **More** link next to the message. To collapse long messages, click the **Less** link.

Update Log

The Update Log page displays the dates and times of product updates.

To view this information, go to **System Status - Messages - Update**.

Event Log

The Event Log page shows the product event errors and messages on various processes such as importing data. It shows legacy and new messages and is used by Technical Support for troubleshooting purposes.

To view this information, go to **System Status - Messages - Event**.

Profiling Log

The Profiling Log page shows debugging information from the profile file related to the product. It shows legacy and new messages and is used by Technical Support for troubleshooting purposes.

To view this information, go to **System Status - Messages - Profiling**.

Settings

Secure Browser Interface


This page allows you install a SSL certificate and to create a secure connection (HTTPS) to your browser interface.

1. Go to **Settings - Secure Interface**.

Interface SSL Certificate

To install/distribute the [Wavecrest Certificate](#) refer to the [Wavecrest Certificate Installation Guide](#) for instructions.

Complete this form to [Generate Certificate Signing Request](#)

Current Certificate:  Wavecrest Computing, Inc. Primary EV Certificate Authority, Sat Jan 25 10:24:12 EST 2048
localhost, Thu Mar 11 14:25:18 EST 2049

2. The product includes by default a private Wavecrest certificate that you can use internally or you have the option to add your own custom certificate.
3. To download the Root Certificate Authority click "Wavecrest Certificate". Refer to the [Wavecrest Certificate Installation Guide](#) for instructions on how to install/distribute the certificate.
4. If you wish to create a Certificate Signing Request (CSR) to send to your Certificate Authority (CA) to be signed, click "Certificate Signing Request" and complete the following form.

Generate Certificate Signing Request X

Domain Name:

Country:


State:

City:

Organization:

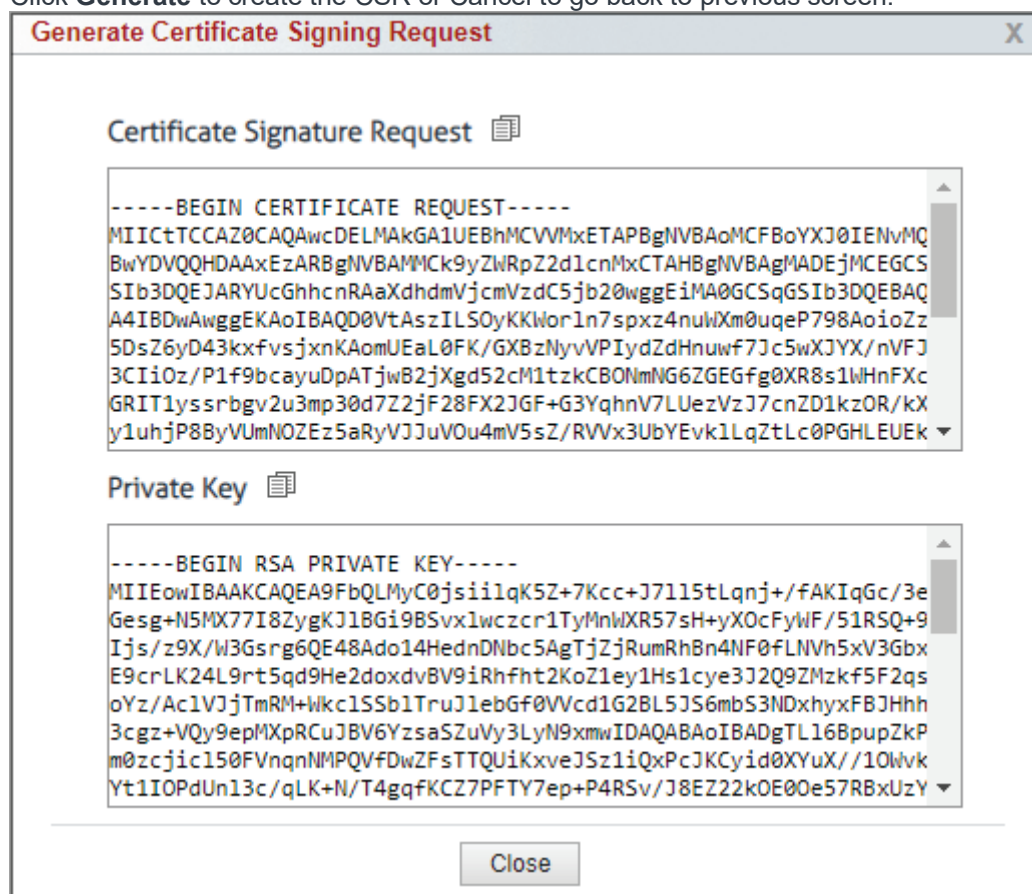
Email:

Organization Units: **New Unit:** +

 Remove All

1. Enter the full domain of the server in the **Domain Name** field. This field is required.

2. In the **Country** field, enter the 2 digit country code where this server resides.
3. If applicable, in the **State** field, enter the state in which the server resides.
4. If applicable, in the **City** field, enter the city in which the server resides.
5. In the **Organization** field, enter your organization name. The default value is pulled from the information on the License screen.
6. In the **Email** field, enter the email of the person in charge of the server. The default value is the email associated with the current login.
7. In the **Organization Units**, add any departments or groups that this server belongs to (eg. IT Group) by typing the name of the Unit in the text field next to **New Unit** and hitting the + icon. Multiple units can be added in order to create a nesting effect (eg. Security Audit unit under IT unit). Use the Remove All button to delete all entries in the Organization Units box.
8. Click **Generate** to create the CSR or Cancel to go back to previous screen.



9. The CSR and private key are provided in PEM format. Forward the CSR to your CA for signing. Save the private key in a secure location and hit the **close** button. Once the CA returns the signed certificate, click on **Settings - Secure Interface** and click on the edit icon next to **Current Certificate**. Select Custom under **Certificate Type** and paste the signed certificate in the **Certificate Data(PEM)** section and append the private key at the bottom of the certificate. Click on Install to configure the certificate in the product.
5. To create a custom certificate using the PEM format click the edit pencil icon and choose **Custom**.
6. Changes to the installed certificate will result in a service restart.

Interface SSL Certificate

NOTE:

- Changes to the installed certificate will result in a service restart.
- If changing from an invalid certificate, to a valid certificate, the browser may need to be closed and re-opened to show the correct certificate status in the address bar.

Certificate Type: Wavecrest Custom

This will create and install a new Wavecrest certificate

- To configure the browser interface connection type, go to **Settings**.

Settings

HTTP: Enable Disable Port:

HTTPS: Enable Disable Port:

Force HTTP to HTTPS Redirect: Enable Disable

- For **HTTP**, the **Enable** option is selected by default. Select **Disable** to not use an HTTP connection.
- The **Port** field is populated with the current interface port. You may enter another available port.
- For **HTTPS**, select **Enable** to use a secure browser connection.
 - The **Port** field is populated with a recommended interface port. You may enter another available port.
- You can enable both HTTP and HTTPS connections to test that the certificate file is correct.
- If both HTTP and HTTPS are enabled, the **Force HTTP to HTTPS Redirect** field becomes available. Select **Enable** to redirect HTTP communication to HTTPS.
- Click **Submit**. A dialog box appears indicating that changing secure browser settings will result in an automatic service restart.
- Click **Continue** to restart the service.

Restart or Shutdown

This page allows you to restart the service for the product if necessary.

- Go to **Settings - Restart or Shutdown**.

Options

Service:

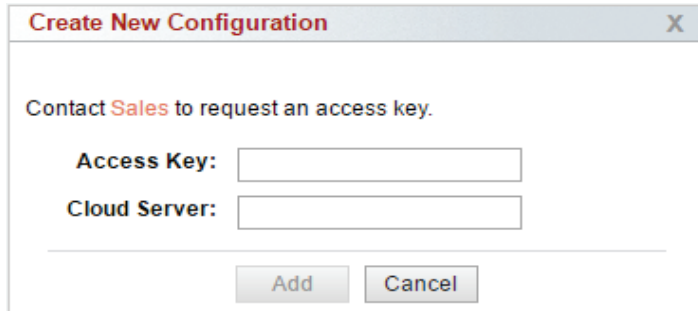
- Click **Restart** to restart the service for the product. You will be prompted twice to confirm the restart.

Directory Agent Configuration

This page allows you to pair your CyBlock Directory Agent installation with your CyBlock Cloud account after you receive your access key. If you have more than one cloud account, those accounts can also be

paired. Pairing allows the AD configuration changes in CyBlock Directory Agent to be automatically synced with your cloud accounts. If you do not have an access key, click the **Sales** link to send an e-mail to Sales.

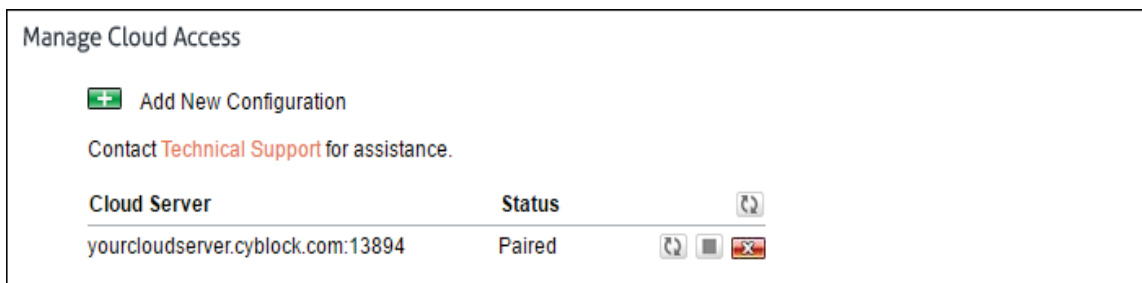
1. Go to **Settings - Cloud**. The Directory Agent Configuration page is displayed.
2. To create a configuration, click the **Add New Configuration** green plus icon.



The dialog box titled "Create New Configuration" contains the following elements:




- Text: "Contact **Sales** to request an access key."
- Input field: "Access Key:" followed by a text box.
- Input field: "Cloud Server:" followed by a text box.
- Buttons: "Add" and "Cancel" at the bottom.

3. If this is the first configuration being created, the Sales link is displayed in the Create New Configuration dialog box.
4. In the **Access Key** field, enter the access key that is assigned to your CyBlock Cloud account. You should have received an e-mail notification with this information.
5. In the **Cloud Server** field, enter the cloud server provided by Sales or in your Welcome to CyBlock Cloud e-mail. This is the pairing server to which CyBlock Directory Agent is connected.
6. Click **Add**. An icon is displayed indicating that pairing is occurring.
7. If the pairing is successful, you will see the cloud server information, the status "Paired," and available icons. This indicates that sync communication is enabled between CyBlock Directory Agent and your cloud account.



The "Manage Cloud Access" interface includes:

- A green plus icon and the text "Add New Configuration".
- Text: "Contact **Technical Support** for assistance."
- A table with the following content:

Cloud Server	Status	
yourcloudserver.cyblock.com:13894	Paired	  

8. To manually sync changes with your cloud account, click the **Sync** icon.
 - The status "Syncing" is displayed.
 - If the sync is successful, the previous status "Paired" is displayed.
 - If the sync fails, an error message and the previous status "Paired" are displayed.
9. To temporarily stop all communication between CyBlock Directory Agent and your cloud account, click the **Stop** icon.
 - Sync communication is disabled between CyBlock Directory Agent and that cloud account.
 - The stop icon toggles to a play icon allowing you to resume sync communication. Note that log messages created while communication is stopped are not transmitted when communication resumes.
 - After resuming communication, it is recommended that you perform a manual sync.
10. To delete the pairing between CyBlock Directory Agent and your cloud account, click the **Delete** red x icon.

- You will be prompted twice to confirm the deletion.
 - After confirming the deletion, all communication is ended between CyBlock Directory Agent and that cloud account.
 - You will need to contact Sales to request a new access key.
11. If you have created more than one configuration and want to manually sync changes with all cloud accounts, click the **Sync All** icon.

Help

Profiling

If you ever experience difficulties that cannot be resolved via online Help, Technical Support may ask you to activate the product's "profiling" mode via the Profiling page. When profiling is activated, the product will generate a considerable amount of data to help Technical Support resolve the issue. Any information sent to Wavecrest will be held in strict confidence and destroyed after the issue has been resolved. When the data is generated, it will be sent to a special file (sprofile.htm) for subsequent transmission to Technical Support via e-mail (support@wavecrest.net).

If you are ever asked to turn on profiling, go to **Help - Support - Profiling** and follow Technical Support's instructions.

Profile Level

Level:

NOTE: Profiling can possibly use a considerable amount of disk space. Use this page only if directed to do so by Technical Support.

Check for Product Updates

Use this page to check for new product versions and download the latest release.

1. Go to **Help - Check for Updates**. This page will tell you if there are any current updates to the version of your product.
2. The **Status** message will let you know if there are any new updates or if your product is currently up to date. If updates are available, click **Update Now** to upgrade the product.

NOTE: While the product is updating, the service will be down for a very short time.

End User License Agreement

This page allows you to accept and print the License Agreement.

1. Go to **Help - EULA**. The End User License Agreement page is displayed.
2. If the License Agreement has not been accepted, as you scroll down to the bottom of the text, the Accept button will become available.
3. Click **Accept**. Once the License Agreement is accepted, the Accept button will no longer be visible.
4. Click **Print** to print the License Agreement. You may return to this page at any time to view or print it.

Wavecrest**CyBlock**[®]Directory Agent



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