



Corticon

Web Console

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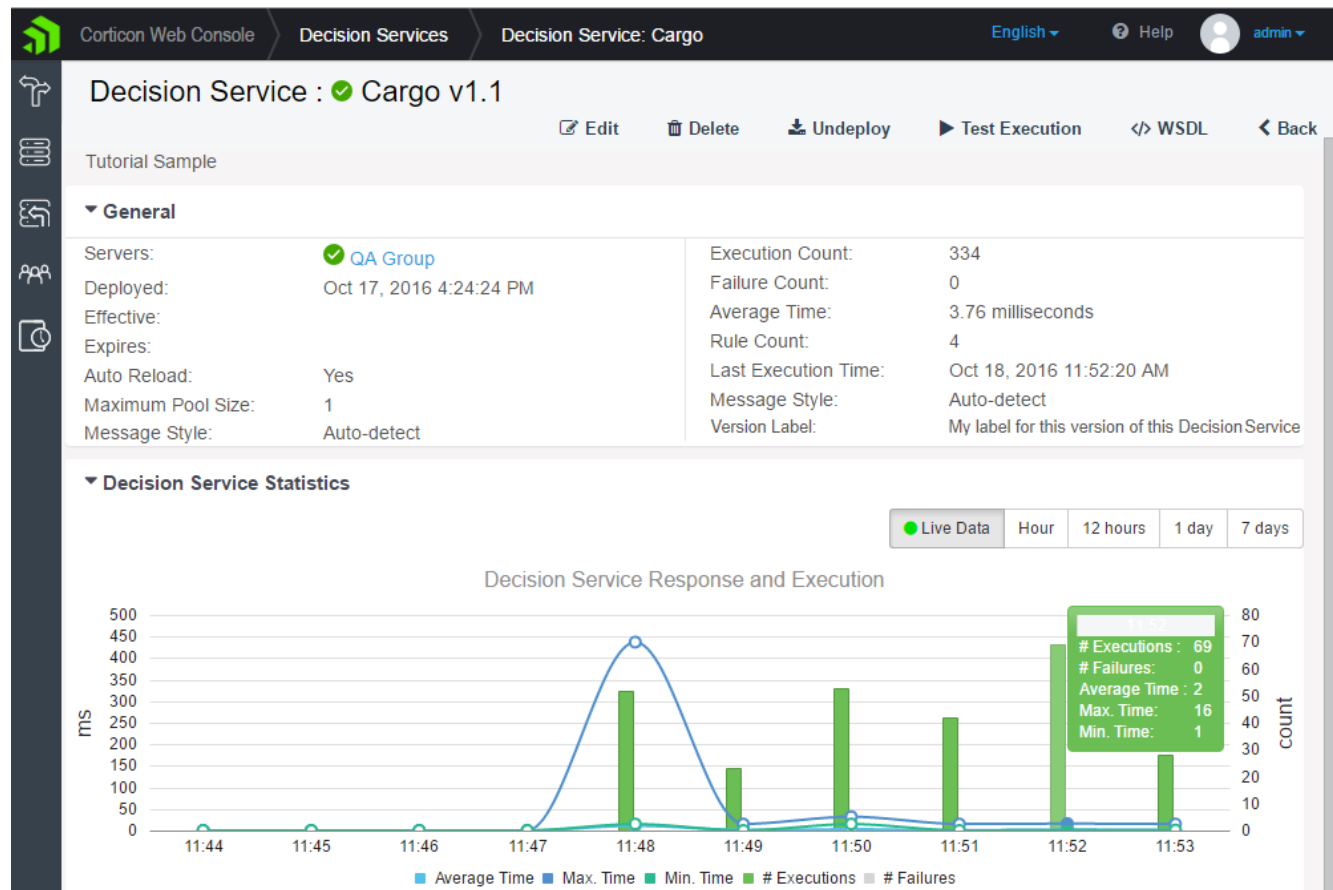
About the Corticon Web Console

Corticon's Web Console provides a central point for administering and monitoring your Java and .NET Corticon Decision Services. Through the console you can easily deploy individual Decision Services to one or more Corticon Servers. You can also group related Decision Services into an Application to deploy and manage them as one. Once deployed, you can easily monitor the performance of the Decision Services and Corticon Servers and view both individual and aggregated metrics. Actions on Decision Services associated with a Server Group are automatically applied to each server member of the group that is running. For example, if you have a Decision Service managed by an Application which is deployed to a Server Group and add another server to the group, the Decision Service will be automatically deployed to the new server. This helps you scale up or scale down the servers in a deployment to meet demand.

The Web Console is a web application that can be installed in the same application server as the Corticon Server for single-server environments or installed separately for multiple-server environments. The choice is yours, depending on the nature of your Corticon deployment. The Web Console maintains configuration information and historical metrics in a local data store. The historical metrics let you see changes in the performance of your Decision Services and Corticon Servers over time.

Corticon's Windows **Start** menu provides shortcut to **Start Corticon Server**. When the Web Console is installed standalone, this starts just the Web Console. When the Web Console is installed together with the Corticon Server, this shortcut starts both of them. Then, the **Corticon Web Console** shortcut launches your default browser to connect to the local Web Console.

Here is a view of a Decision Service with a graph of the responses and executions over a span of a several minutes:



This guide describes user activities in the Web Console interface, followed by an administrator's section that touches on architectural features and management functions.

User Guide

A server administrator uses a web browser to connect to a running Web Console Server. You will see how the Web Console interface works, how you manage Corticon Servers in a distributed architecture, and how you manage and monitor the Decision Services that run on those servers.

Note: If you are getting started with the Corticon Web Console - Requires access to a running network-accessible Corticon Server 6.1 that has the Web Console component. See the *Corticon Installation Guide* for installation information.

Note: If you upgraded the Corticon Server - An updated Corticon Server with the Web Console component will likely have left residual display and link data in its cache. Clear the browser cache to ensure that the Web Console starts cleanly.

To connect to a running Web Console Server:

- On any device, in a supported browser, enter the hostname where Web Console is running followed by the port value (typically 8850) and then `/corticon`. For example:

```
http://localhost:8850/corticon
```

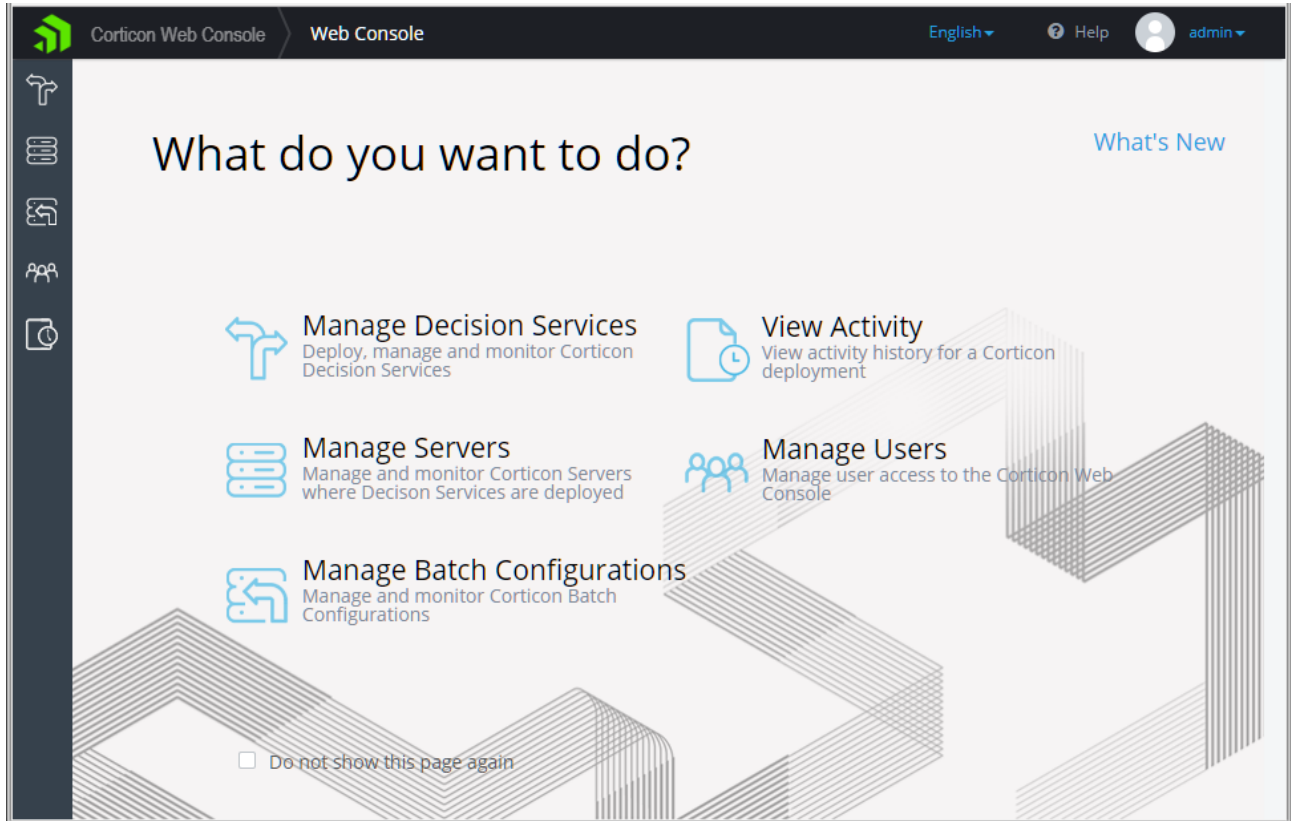
- When you are on the machine that hosts the Web Console installation, simply choose **Start > Progress > Corticon 6.1 Web Console**

Logging in to the Web Console

Enter your user credentials in the Web Console login page. When you start using the Web Console, the one pre-defined user is the administrative user, `admin`, with the default password `admin`. If you are the administrator, you should change the default password soon after you log in. Only the `admin` user can add new users. All users have rights to deploy and manage Decision Services. If your role is as a user, obtain your user credentials from your Web Console administrator.

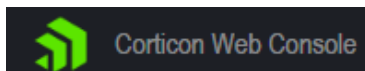
What Do You Want To Do?

When you log in for the first time, you see a welcome page that acquaints you with the Web Console's functions. You also can access **What's New** in Corticon.



Click any action button on the welcome page, the title bar, or the function pane to close the welcome page and open the chosen page.

You can re-open the welcome page by clicking in the upper left corner of the page:



Navigation

The general navigation elements of Web Console pages are:

- **Title bar:**
 - The navigation path to the current page in the Web Console.
 - **English:** The default language is shown. Choose your preferred available language from its drop-down list to view text in that language as well as localized formatting of dates and numbers.
 - **Help:**
 - **Help Contents:** Opens a new tab linked to the Web Console help for this release.
 - **About:** Version information about the connected Web Console Server.
 - **Community:** Opens a new tab linked to the Progress Corticon community site.
 - **admin** (the User Name that enabled log in)
 - **Profile:** Lets the user change their password, full name, and email address.

- **Logout:** Closes the session and logs the user off the Web Console Server.
- **Function bar** on the left provides access to the functional areas described on the page:



Note: Automatic logout - A user gets logged out of their Web Console session when they are inactive for a period of time specified by the Web Console administrator. A warning message is issued several seconds before the Web Console logs out with the opportunity to click **OK** to reset the inactive timeout period.

For details, see the following topics:

- [Components in a Corticon deployment](#)
- [Servers groups and Servers](#)
- [Decision Services and Applications](#)
- [Batch Configurations](#)
- [How to view the Activity Log](#)

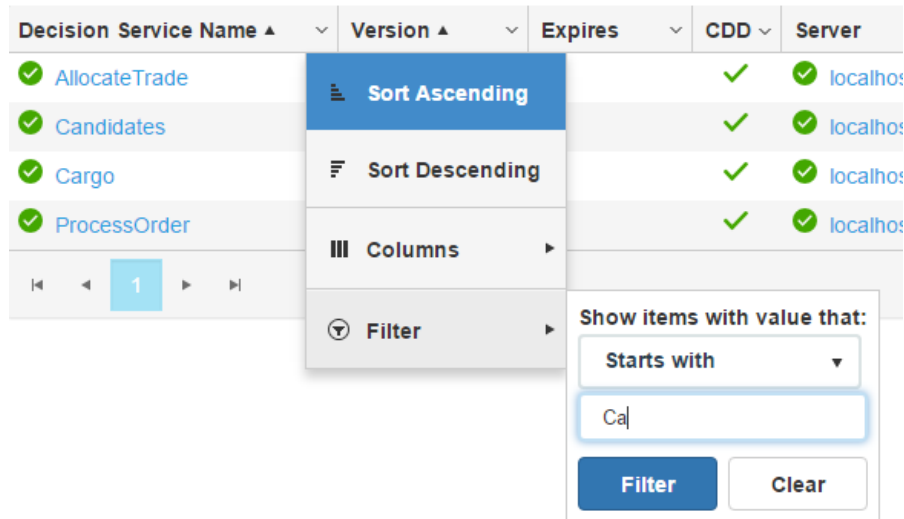
Components in a Corticon deployment

The components that you work with in the Web Console are:

- **Decision Services** - The Corticon Decision Services added to the Web Console. A Decision Service is a set of Corticon rules and supporting assets packaged for deployment.
- **Applications** - Collections of one or more Decision Services to be managed as set. For example, a set of Decision Services in support of a business process that you want to deploy or monitor as a whole.
- **Servers** - Individual instances of Corticon Java or .NET Servers that have been registered with the Web Console. Once registered, the servers are available for deployment of Decision Services.
- **Server Groups** - Groups of one more Servers. Server Groups are useful when you want to deploy Decision Services to a set of Servers. For example, a set of Servers behind a load balancer, or in a regional location.
- **Users** - Defined users who can use the Web Console to administer a Corticon deployment.
- **Activity Logs** - Record of user actions in the Web Console and other asynchronous events such as a server going offline.

Sorting and filtering components

In the pages that list Servers, Decision Services, and Users, you can readily adjust the column sizes and display as well as sort and filter which lines qualify for display by clicking on a column header, as illustrated:



Servers groups and Servers

The Web Console allows you to manage and monitor Corticon Servers. The servers can be managed individually or in groups. Server Groups are useful when you want to deploy Decision Services to a set of Corticon Servers. A common use case is a set of Corticon Servers running behind a load balancer where each Server needs to have the same set of Decision Services deployed. Additionally, you can view aggregate metrics for the performance of the servers in a group.

Add Server groups and Servers

As Corticon Servers are the deployment platform that runs Corticon Decision Services, your Web Console requires that you have one or more Corticon Servers under management so that you can deploy Decision Services and Applications. You can create **Server Groups** to enable common distribution of Decision Services to all servers in the group, and immediate provisioning of new servers added to the group.

Note: When you first start the Web Console in a new installation, no servers are under management unless you installed both Corticon Server for Java and Corticon Web Console. In that case, the Corticon Server is, by default, brought under management in the Web Console as the server `localhost`.

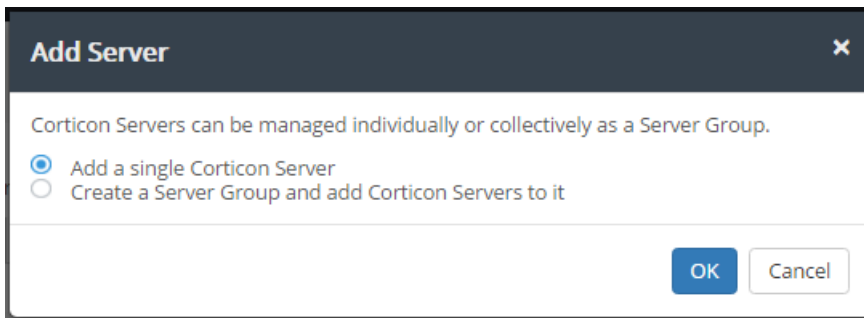
To add servers and server groups:

1. Connect to the Web Console server where you want to add servers and server groups.

2. Click the **Servers** button: 

3. Click **+ Add Server**: 

4. In the **Add Server** dialog box, choose whether to add a single server or a server group:



Add Server [X]

Corticon Servers can be managed individually or collectively as a Server Group.

☒ Add a single Corticon Server
☐ Create a Server Group and add Corticon Servers to it

OK Cancel

5. Click **OK**.

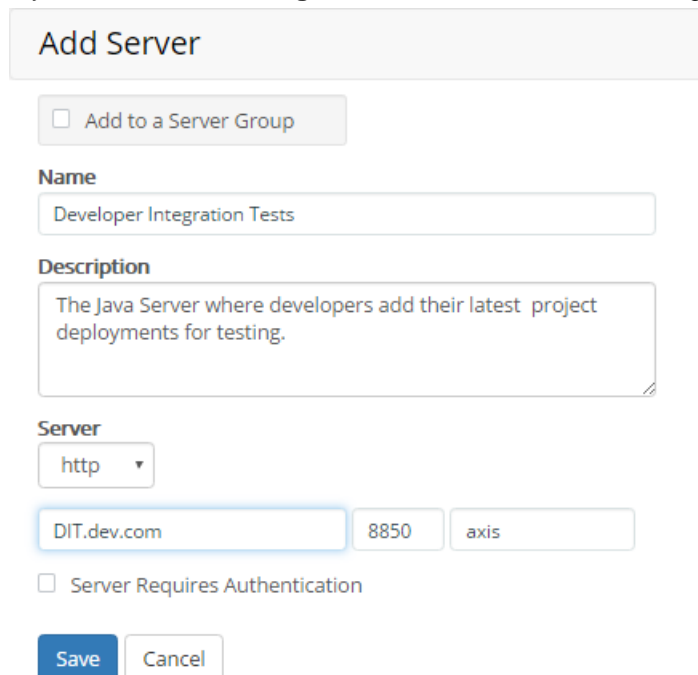
6. There are a few ways to add servers. The following entries are common **Server** information to each of them:

- **Protocol:** Default is HTTP. You can choose HTTPS, if this server has enabled it.
- **Hostname:** Enter the DNS-resolvable name or static IP address (avoid *localhost* and *127.0.0.1*)
- **Port:** 8850 is the default HTTP port, 8851 for HTTPS, 80 typically on IIS
- **Context URL:** The default is *axis*
- **Server Requires Authentication:** When authentication has been enabled on a server, choose this option, and then supply the user name and password for the Web Console to use to establish a connection to the server.

Note: In addition, the default context URL, **axis**, can be replaced with a preferred context URL, such as **CorticonProduction**. This functionality -- renaming a default *axis.war* file to a preferred *.war* name -- enables multiple server deployments to use the same host port and supporting resources.

Adding a single Corticon Server

If you choose **Add a single Corticon Server**, the following dialog box opens:



Add Server

☐ Add to a Server Group

Name
Developer Integration Tests

Description
The Java Server where developers add their latest project deployments for testing.

Server
http

DIT.dev.com 8850 axis

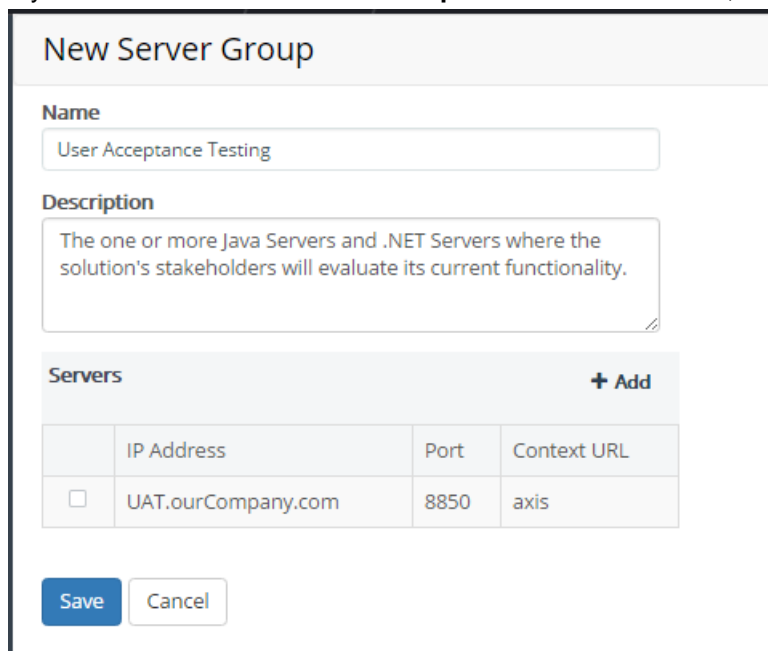
☐ Server Requires Authentication

Save Cancel

Enter the name you want to describe this server, and a description. Then enter then the server information. Click **Save** when your entries are complete.

Adding a Corticon Server to a new Server Group

If you choose **Create a Server Group and add Servers to it**, the following dialog box opens:



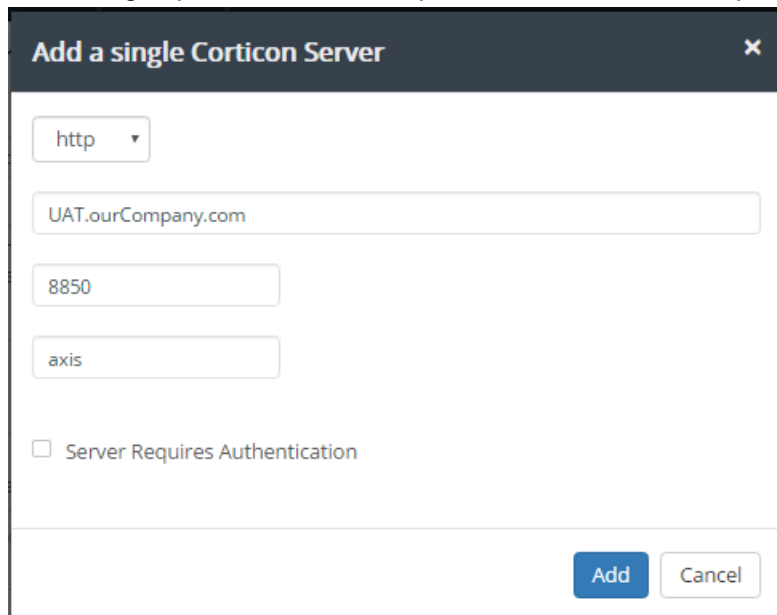
The 'New Server Group' dialog box contains the following fields and controls:

- Name:** A text input field containing 'User Acceptance Testing'.
- Description:** A text area containing 'The one or more Java Servers and .NET Servers where the solution's stakeholders will evaluate its current functionality.'
- Servers:** A table with a '+ Add' button to its right.

	IP Address	Port	Context URL
<input type="checkbox"/>	UAT.ourCompany.com	8850	axis

At the bottom are 'Save' and 'Cancel' buttons.

Enter the group name and a description, then click **+ Add** to open the following dialog box:



The 'Add a single Corticon Server' dialog box contains the following fields and controls:

- Protocol:** A dropdown menu showing 'http'.
- IP Address:** A text input field containing 'UAT.ourCompany.com'.
- Port:** A text input field containing '8850'.
- Context URL:** A text input field containing 'axis'.
- Server Requires Authentication:** A checkbox that is currently unchecked.
- Buttons:** 'Add' and 'Cancel' buttons at the bottom right.

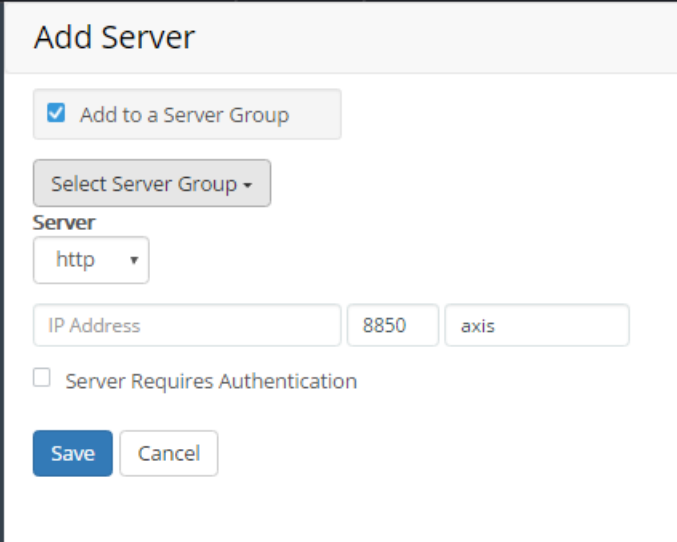
Enter then the server information. Click **Add** when your entries are complete.

If you want to add more servers at this time, click **+ Add** and follow the steps.

When your new server group is complete, click **Save**.

Adding a Corticon Server to an existing group

When you choose **Add a single Corticon Server**, the **Add Server** dialog box provides a way to add the server to an existing group:



The **Add Server** dialog box contains the following elements:

- ☒ **Add to a Server Group**
- Select Server Group** dropdown menu
- Server** dropdown menu with **http** selected
- IP Address input field, Port input field (8850), and Context input field (axis)
- ☐ **Server Requires Authentication**
- Save** and **Cancel** buttons

Click **Select Server Group** to choose a group, and then enter the server information. When your new server and its group assignment are complete, click **Save**.

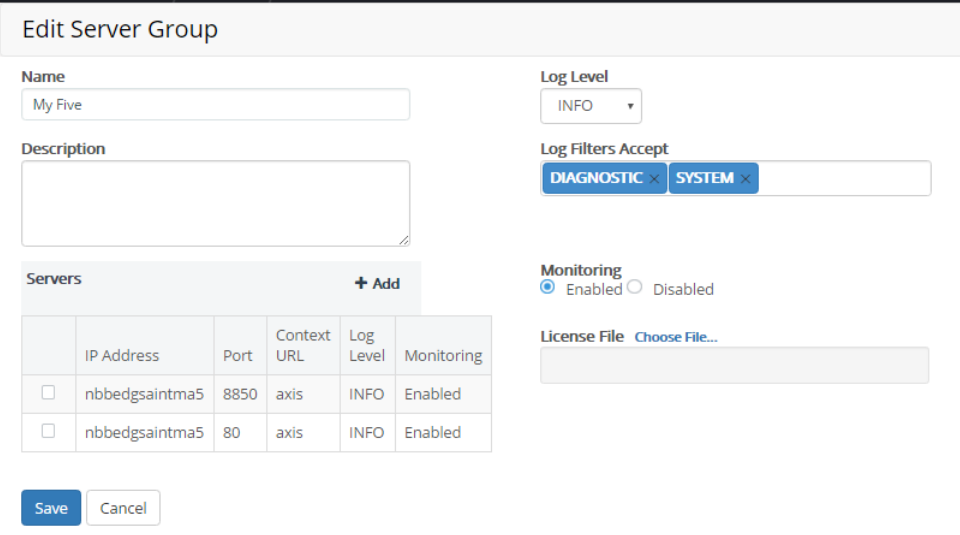
Note: Adding a server -- individually or within a group -- as `localhost` might seem practical during evaluation and testing, but when you access Web Console from a remote machine that has a server installation that you want to add, you might find that references to `localhost` are distracting as it is not *this* localhost. It is a good practice to always use DNS-resolvable hostnames or static IP addresses.

Edit Server groups and Servers

After adding a Server group or a server, you can change its configuration.

To edit a Server Group:

Select **Edit** on the server group's **Details** page to open its edit dialog box:



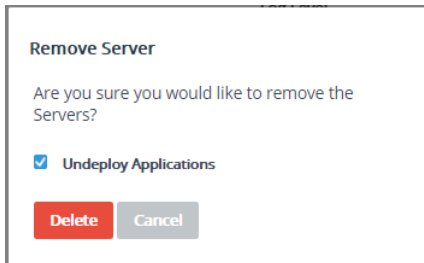
The **Edit Server Group** dialog box contains the following elements:

- Name** input field (My Five)
- Description** text area
- Log Level** dropdown menu (INFO)
- Log Filters Accept** buttons: **DIAGNOSTIC** and **SYSTEM**
- Monitoring** radio buttons: **Enabled** (selected) and **Disabled**
- License File** [Choose File...](#) button
- Servers** section with a **+ Add** button and a table:

	IP Address	Port	Context URL	Log Level	Monitoring
<input type="checkbox"/>	nbbcdgsaintma5	8850	axis	INFO	Enabled
<input type="checkbox"/>	nbbcdgsaintma5	80	axis	INFO	Enabled

Save and **Cancel** buttons are at the bottom.

1. Edit the name and description as appropriate
2. Click **+ Add** to add more servers.
3. Select a server to access its edit and delete functions. **Edit** lets you change the server information. **Delete** removes the server from the group and the Web Console. You are asked to decide whether to undeploy any Decision Services before deletion, and then confirm the deletion action:



Remove Server

Are you sure you would like to remove the Servers?

☒ Undeploy Applications

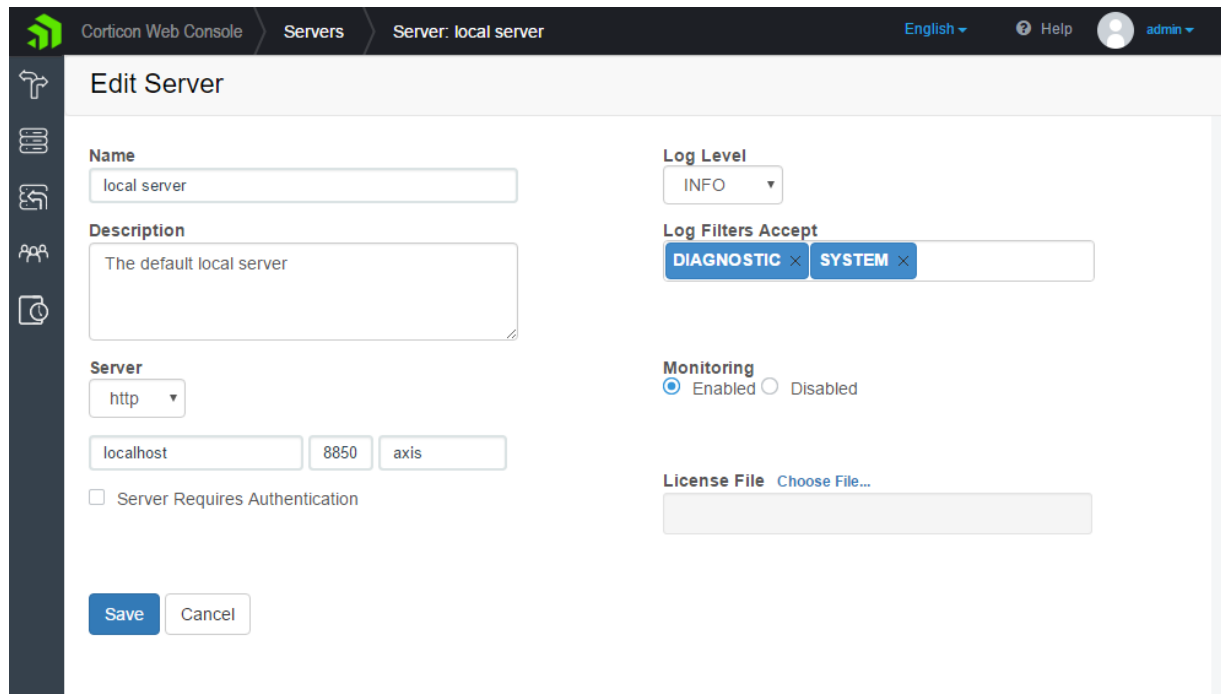
Delete **Cancel**

Note that deleting a server from the Web Console does not stop or delete the actual running server instance; it just removes the registration of the server with the Web Console. The server continues to run and could be added back to the Web Console.

4. You can change other server properties that will apply to all servers in the group as illustrated on the right side of the dialog box: **Log Level**, **Log Filters Accept**, **Monitoring**, and **License File**.

To edit a Server:

Select **Edit** on the server's **Details** page to open its edit dialog box:



Corticon Web Console Servers Server: local server English Help admin

Edit Server

Name
local server

Description
The default local server

Server
http
localhost 8850 axis

☐ Server Requires Authentication

Log Level
INFO

Log Filters Accept
DIAGNOSTIC SYSTEM

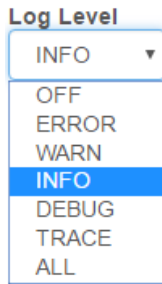
Monitoring
☒ Enabled ☐ Disabled

License File Choose File...

Save **Cancel**


Edit:

- **Name**
- **Description**
- **Server** hostname/IP address, port, and context URL
- **Log level** - The log level on the selected server. The default level is INFO. When you change the level and save the edits, it is immediately applied to that server without stopping and restarting the server. The logs promptly reflect the changed level of detail.



- **Monitoring** - Determines whether the statistics from this server are gathered by the Web Console and stored for later analysis.
- **License File** - Copies the selected `CcLicense.jar` (or its preferred name) from the machine where the browser is connected to the Web Console (or a network-accessible location) to the `CcServerSandbox` on the machine hosting this server.

Explore Server features

When you click the **Servers** button:  in the left panel, the servers and server groups are listed. In this example, there is one Server Group and one Server:

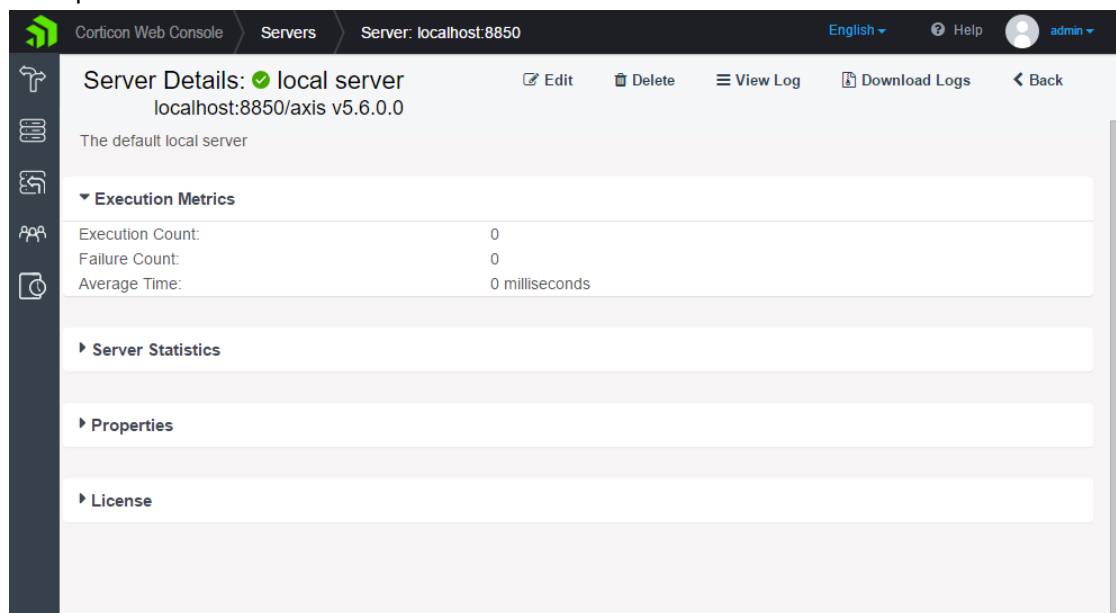
Servers

Manage and monitor Servers where Decision Services are deployed.

Name	Type	Description	Status	Executions	Average Time (ms)
local server	Server	The default local server	✓	0	0.00
QA Group	Server Group	Test servers	✓	334	3.76

1 - 2 of 2 items

Clicking on a server or server group **Name** selects it, and then opens its **Details** page to display the deployment and operational information about it.



For the selected Server, you can choose **Edit**, **Delete**, **View Log**, or **Download Logs**.

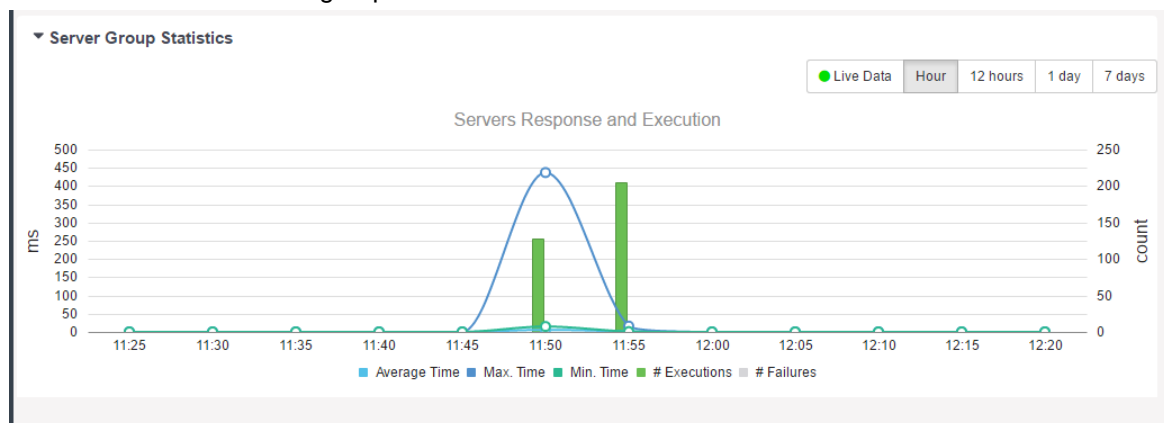
Server Execution Metrics

Execution metrics provide counts and performance data of all Decision Services running on the selected server, or aggregated across a server group.

▼ Execution Metrics	
Execution Count:	334
Failure Count:	0
Average Time:	3.76 milliseconds

Server Statistics

You can look at metrics and statistics at several levels from for all Decision Services running on server or aggregated for all Decision Services and Servers in a server group. The following view shows the categories of information for a server group:



Properties

A Server's **Properties** lists important settings and platform environment data of the server, from its point-of-view:

▼ Properties			
Maintenance Service Enabled	Yes	Java Version	1.8.0_131
Maintenance Service Interval	30000	Java Vendor	Oracle Corporation
Monitoring Service Enabled	Yes	Operating System	Windows 10
Maximum Memory	1003 MB	Operating System Version	10.0
Total Memory	503 MB	Architecture	amd64
Free Memory	273 MB	Autoload Directory	C:/_60x/work_dir/Server/cdd
Number Of Cores	8	Sandbox Directory	C:/_60x/work_dir/Server/SER/CcServerSandbox

Properties are specific to a Corticon Server on the machine where it is installed and running. They are accessed for an individual server, or a member of a server group.

License

License information shows the location of the Corticon license that a specific server is using, as well as essential information about that license:

▼ License	
License Path	C:/_60x/work_dir/Server/pas/server/webapps/axis/WEB-INF/lib/CcLicense.jar/CcLicense.lic
Licensed To	Evaluation
License Deactivation Date	Jun 1, 2019
License Database Access	Yes

The license file that enabled the server to run is typically updated only when a new license has been provided that changes the expiration and enabled features for that server.

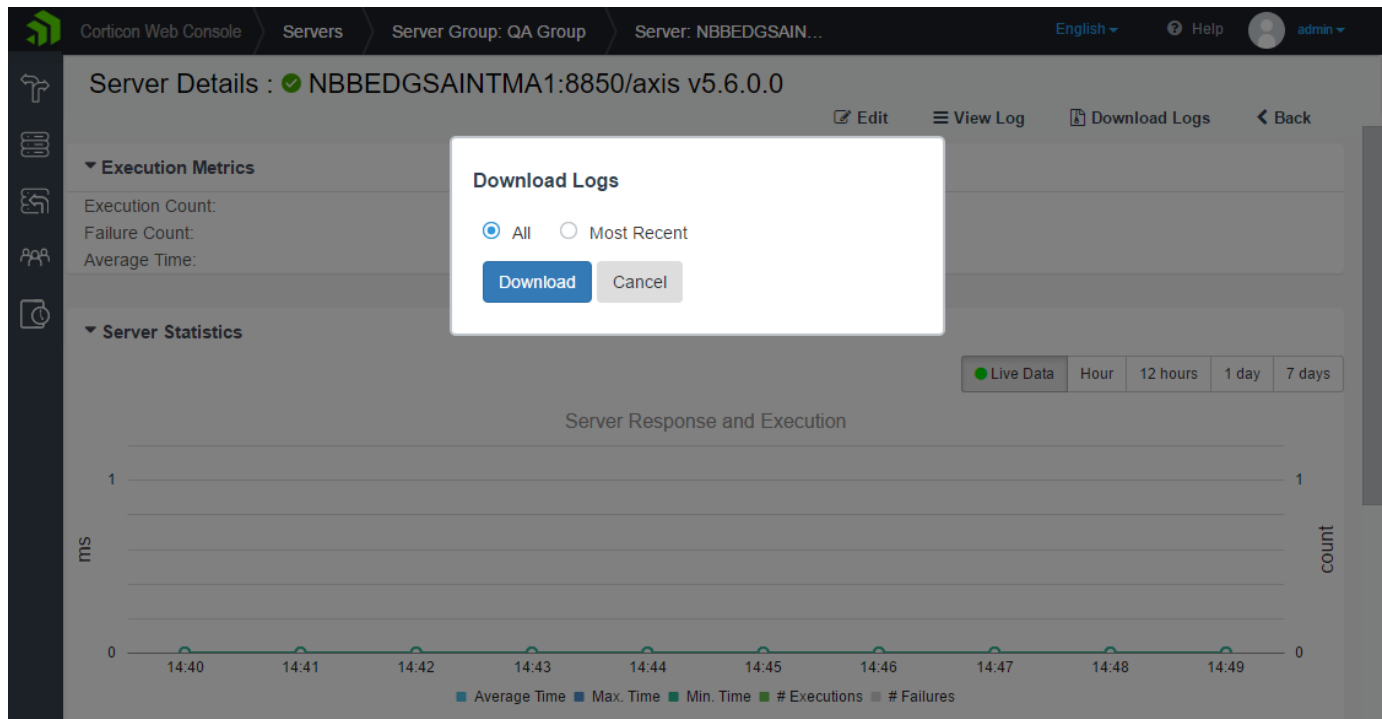
View log

Servers lets you access the tail of the current `CcServer.log` file that the server is using:

Corticon Web Console				
Servers				
Server Group: QA Group				
Server: NBBEDGSAIN...				
Log				
English Help admin				
Log NBBEDGSAINMA1:8850/axis				
Back				
Timestamp	Level	Logger	Marker	Message
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,shp=510.625,shp=263.09999084472656,sex=0,seq=0,sec=278,sfc=6,saex=3.539568345323741,sawt=0.5071942446043165
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,ds=ProcessOrder.1.10,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,ds=Candidates.1.14,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,ds=AllocateTrade.1.14,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,ds=Cargo.1.1,ec=278,aex=3.539568345323741,awt=0.5071942446043165,fc=6
Oct 18, 2016 2:48:30 PM	INFO	Cc	DIAGNOSTIC	id=1476816510115,ds=Cargo.0.16,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:00 PM	INFO	Cc	DIAGNOSTIC	id=1476816480099,shp=510.6875,shp=317.77515411376953,sex=0,seq=0,sec=278,sfc=6,saex=3.539568345323741,sawt=0.5071942446043165
Oct 18, 2016 2:48:00 PM	INFO	Cc	DIAGNOSTIC	id=1476816480099,ds=ProcessOrder.1.10,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:00 PM	INFO	Cc	DIAGNOSTIC	id=1476816480099,ds=Candidates.1.14,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:00 PM	INFO	Cc	DIAGNOSTIC	id=1476816480099,ds=AllocateTrade.1.14,ec=0,aex=0.0,awt=0.0,fc=0
Oct 18, 2016 2:48:00 PM	INFO	Cc	DIAGNOSTIC	id=1476816480099,ds=Cargo.1.1,ec=278,aex=3.539568345323741,awt=0.5071942446043165,fc=6

Download log

Corticon Web Console enables you to download and view Server log files. This is especially useful when you need to locally examine a remote Server's log files to identify the source of a problem. To download a Server's log files, click **Download Logs** in the Server page. This opens a dialog box where you can choose to download **All** log files or only the **Most Recent**. If you choose **All**, all log files that have been retained since installation will be downloaded. If you choose **Most Recent**, you will get all log files that have been modified by the Server in the last 24 hours. Select the appropriate option and click **Download**. This downloads a ZIP file named `CcServerLog.zip` that contains the Server log files.



To know more about troubleshooting a problem by examining Server logs, see *Troubleshooting Corticon Server in the Server Guide*.

Decision Services and Applications

Types of Decision Services

Many Decision Services might be deployed on a Corticon Server. There are two types of Decision Services from the point of view of the Web Console, based on how they were deployed:

- **Managed Decision Services** are those deployed through the Web Console. For managed Decision Services the Web Console has the EDS file, and can perform more management activities such as deploying it to additional Corticon Servers. Managed Decision Services can be:
 - Added directly through the Web Console's **Add Decision Service** feature.
 - Added directly from Corticon Studio using the Studio's **Package and Deploy** feature. Studio prompts for the Application where the Decision Service will be added, and the Server or Server Group where it will be deployed.
- **Discovered Decision Services** are those deployed not through the Web Console but through another means. The management operations the Web Console can perform on discovered Decision Services is limited so as not to conflict with how they were deployed. Discovered Decision Services could be:
 - Decision Services packaged and deployed directly from Corticon Studio or any of the deployment tools.
 - These are Decision Services deployed through Corticon Deployment Descriptors (CDDs) -- text-based files that specify a Decision Service to be deployed and its deployment properties. CDD files are automatically loaded by the Corticon Server.

The Decision Services page shows all the types of Decision Services on the managed servers, as illustrated:

Decision Services

Managed Decision Services
Decision Services deployed using the Web Console, can be fully managed here.

Application Name	Servers	Executions	Average Time (ms)
Insurance	local server	0	0.00
Decision Service Name	Version	Executions	Average Time (ms)
Generate Policy	0.41	0	0.00
Price Policy	0.41	0	0.00

1 - 1 of 1 items

Decision Service Name	Version	Servers	Executions	Average Time (ms)
Cargo	1.1	QA Group	0	0.00

1 - 1 of 1 items

Discovered Decision Services
Decision Services not deployed using the Web Console, can be viewed here but not fully managed.

Decision Service Name	Version	Effective	Expires	CDD	Server	Executions	Average Time (ms)
AllocateTrade	1.14				localhost:8850/axis	0	0.00
AllocateTrade	1.14				NBBEDGSAINTMA5:8850/axis	0	0.00
AllocateTrade	1.14				NBBEDGSAINTMA1:8850/axis	0	0.00

How to use Applications

An Application is a group of Decision Services that you can deploy to a Server or Server Group. When you deploy an Application to a Server Group, all Decision Services in the Application are deployed to each of the Corticon Servers in the Server Group. Further, if a new server is added to the Server Group, the Web Console automatically deploys the Application to it. An Application is therefore, a unit of deployment. It enables you to manage a set of related Decision Services more easily.

In order to add a Decision Service to an Application, you need to have a Decision Service file (.eds) that was packaged from a Ruleflow. There are several toolsets that perform this task, as discussed in the section *"How to package and deploy Decision Services" in the Deployment Guide*.

A feature of Corticon Studio, as described in *"Deploying to Corticon Web Console" in the Deployment Guide*, enables you to select Ruleflows in a project to deploy as Decision Services that are sent to a new or existing Application assigned to a server or server group managed in a Web Console. As a result, the Decision Services are immediately deployed (or redeployed) to the server or all active servers in the Server Group.

Add or Edit a Decision Service

The following procedures show to bring a Decision Service under management either as an independent Decision Service, or as a member of an Application.

Note: As the general steps are common to both adding and editing a Decision Service, this topic focuses on the tasks when adding a Decision Service, and then shows how to access a Decision Service to edit it.

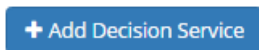
To add a Decision Service:

1. Connect to the Web Console server where you want to add Decision Services.

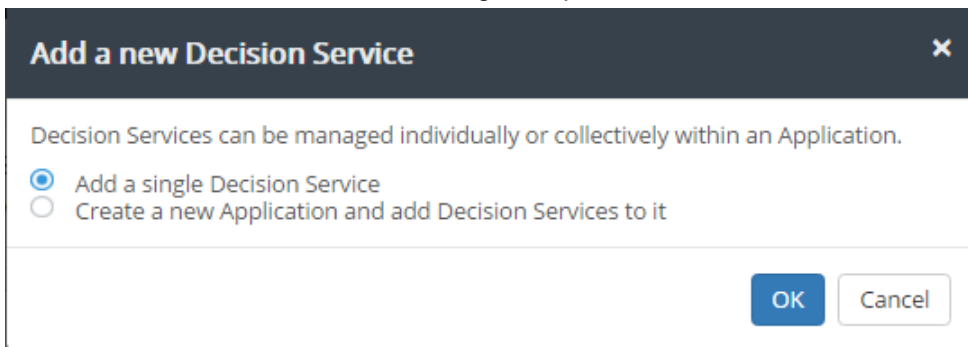
2. Click the **Decision Services** button:



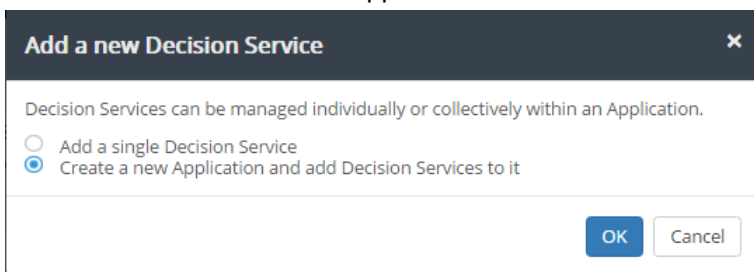
3. Click **+ Add Decision Service**:



4. The **Add a new Decision Service** dialog box opens:



5. You can choose to create an Application for the Decision Service you are adding:



- a. If you choose that option and click **OK**, the **New Application** dialog opens:

Corticon Web Console | Decision Services | New Application | English | Help | admin

New Application

Name
Insurance

Description
Insurance Sample

Servers
QA Group

Rule Messages Restrictions

- ☐ Restrict Info Rule Messages
- ☐ Restrict Warning Rule Messages
- ☐ Restrict Violation Rule Messages

Decision Services [+ Add](#)

	Name	File Name	Database Access Mode
<input type="checkbox"/>	GeneratePolicy	GeneratePolicy.eds	None
<input type="checkbox"/>	PricePolicy	PricePolicy.eds	None

Buttons: Save, Save & Deploy, Cancel

- b. Enter a Name and Description.
 - c. Choose the server or server group where the Application's Decision Services are to be deployed.
 - d. Set options that will apply to all Decision Services in the Application.
 - e. Click **+ Add** for each Decision Service you want to add to the Application.
6. On either path, the **Add Decision Service** dialog box opens at the **Decision Service** tab:

Add Decision Service

Decision Service | Database | Advanced | Monitored Attributes

When adding a Decision Service you must specify a name, select a server and provide the EDS file of the Decision Service. Other properties are optional. To add the Decision Service to an existing Application select "Add to an Existing Application"

Name
Decision Service Name

Description

EDS File [Choose File...](#)

Servers
Select Servers

☐ Add to an Existing Application

Buttons: Save, Save & Deploy, Cancel

- a. Enter a name. Note that this will be its name when deployed, not the name of the EDS file you choose.
 - b. Add a description.
 - c. Click **Choose file** to locate an EDS file.
 - d. Choose a server or server group
 - e. If you started this process as a single Decision Service, you can choose to add it to an existing application from the list that will be offered.
7. Click the **Database** tab to access its options:

The screenshot shows a dialog box titled "Add Decision Service" with a close button (X) in the top right corner. It has four tabs: "Decision Service", "Database" (which is selected), "Advanced", and "Monitored Attributes". Below the tabs, there is a text instruction: "If this Decision Service connects to a database you must provide a Datasource Configuration file with connection parameters." This is followed by a label "Datasource Configuration File" and a "Choose File..." button. Below this is a large, empty rectangular text input field. Another text instruction follows: "If this Decision Service uses Corticon EDC to connect to a database you must select a EDC Access Mode of Read Only or Read/Update." Below this is the label "EDC Access Mode" and three radio button options: "None" (which is selected), "Read Only", and "Read/Update". At the bottom right of the dialog box are three buttons: "Save", "Save & Deploy", and "Cancel".

- a. **Datasource Configuration File:** Specify the XML file that contains the data source access properties. To learn how to generate this file from Corticon Studio, see the topic: *"Export the Datasource Configuration file" in the Data Integration Guide*.
- b. You can change the **EDC Access Mode** option to either **Read Only** or **Read/Update** to extend the dialog tab to display additional configuration settings:

- c. In the **EDC Access Mode**, choose the appropriate access option. This setting controls how a Decision Service will access connected databases. Select **Read Only** or **Read/Update** to then expose additional settings that you need to configure:

- **EDC Entities Returned Mode:** Choosing **All Entities** returns all records from the database when the Decision Service executes. Choosing **Incoming and New Entities** returns entities that were in the request message and only those entity records that are added or modified in the database when the Decision Service executes. Select the appropriate option.
- **EDC Caching:** Database caching enables Corticon to store often-used data in a cache. This improves the performance of the Decision Service since it can read and write data in the cache faster than if this data was in the database. If you choose **Enabled**, database caching will be enabled for the Decision Service. To learn more about database caching, see the topic: *"How to work with database caches" in the Data Integration Guide*.

Important: Turning caching on or off - If you want to enable or disable caching on a deployed Decision Service, the mechanisms of caching require that you undeploy and delete the Decision Service, and then add and deploy the Decision Service again with the cache enablement setting you want.

8. Click the **Advanced** tab to access its options:

Add Decision Service [X]

Decision Service Database **Advanced** Monitored Attributes

Advanced properties give you greater control over the execution of a Decision Service.

Maximum Pool Size

XML Message Style
☒ Auto-detect ☐ Flat ☐ Hierarchical

Rule Messages Restrictions
☐ Restrict Info Rule Messages
☐ Restrict Warning Rule Messages
☐ Restrict Violation Rule Messages

Save Save & Deploy Cancel

Consult the *Server Guide* for more information about these settings.

- a. In the **Maximum Pool Size** field, specify how many execution threads for this Decision Service will be added to the execution queue. If you leave this field blank, the Web Console will set a default value of 1.
 - b. In the **XML message style** section, choose whether request messages for this Decision Service should contain a **Flat** or **Hierarchical** payload structure. **Auto Detect** accepts either style.
9. Click the **Monitored Attributes** tab to access its options:

Add Decision Service [X]

Decision Service Database Advanced **Monitored Attributes**

Optionally select one or more attributes from a Decision Service to monitor to gain insight into it's processing.

Attribute Analysis Buckets Add

Save Save & Deploy Cancel

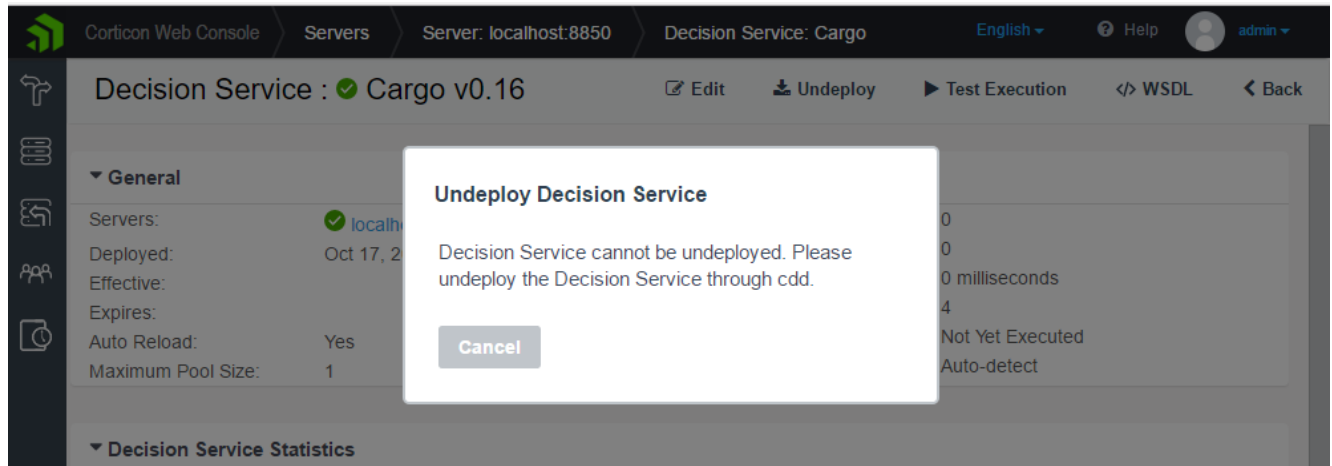
See how to set up use Monitored Attributes in the topic [Monitored Attributes](#) on page 33

10. Click **Save** to store the Decision Service but not deploy it. Click **Save & Deploy** to store the Decision Service and also deploy it. Click **Cancel** to close without making changes.

Undeploy a Decision Service on a Server

You can undeploy Decision Services by selecting the Decision Service and clicking **Undeploy**. Performing this operation on a managed Decision Service takes you to the Application details page, which has options to remove individual Decision Services or undeploy the Application altogether.

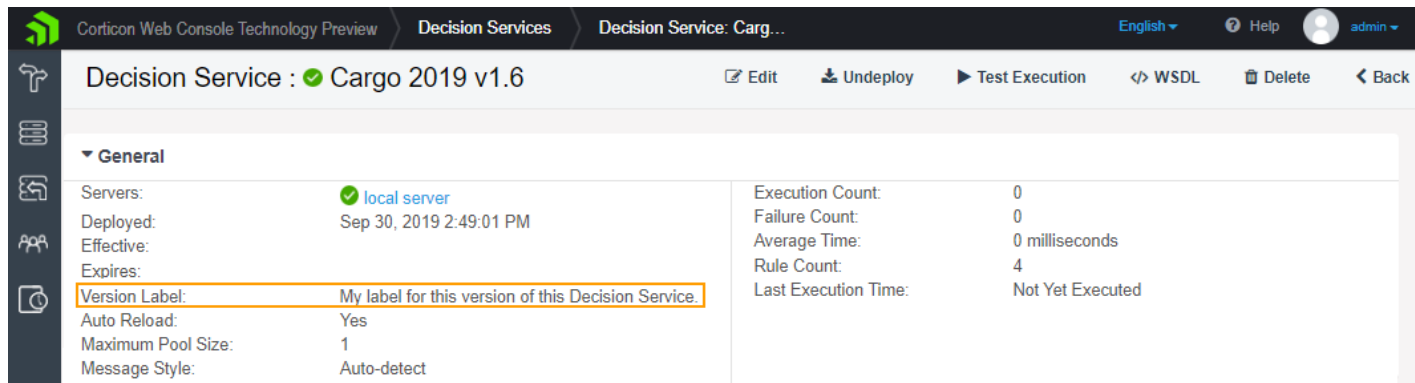
Note: In the Web Console, you cannot undeploy a Decision Service that was deployed using a CDD file.



Decision Service General Information

General metrics are a simple table of the count of all request executions of a Decision Service on the selected server, the count of failures, and the average execution time. The average time is average execution time for execution of all the Decision Services on this server.

The Version Label is the text that was added to the Ruleflow that generated the versioned Decision Service.



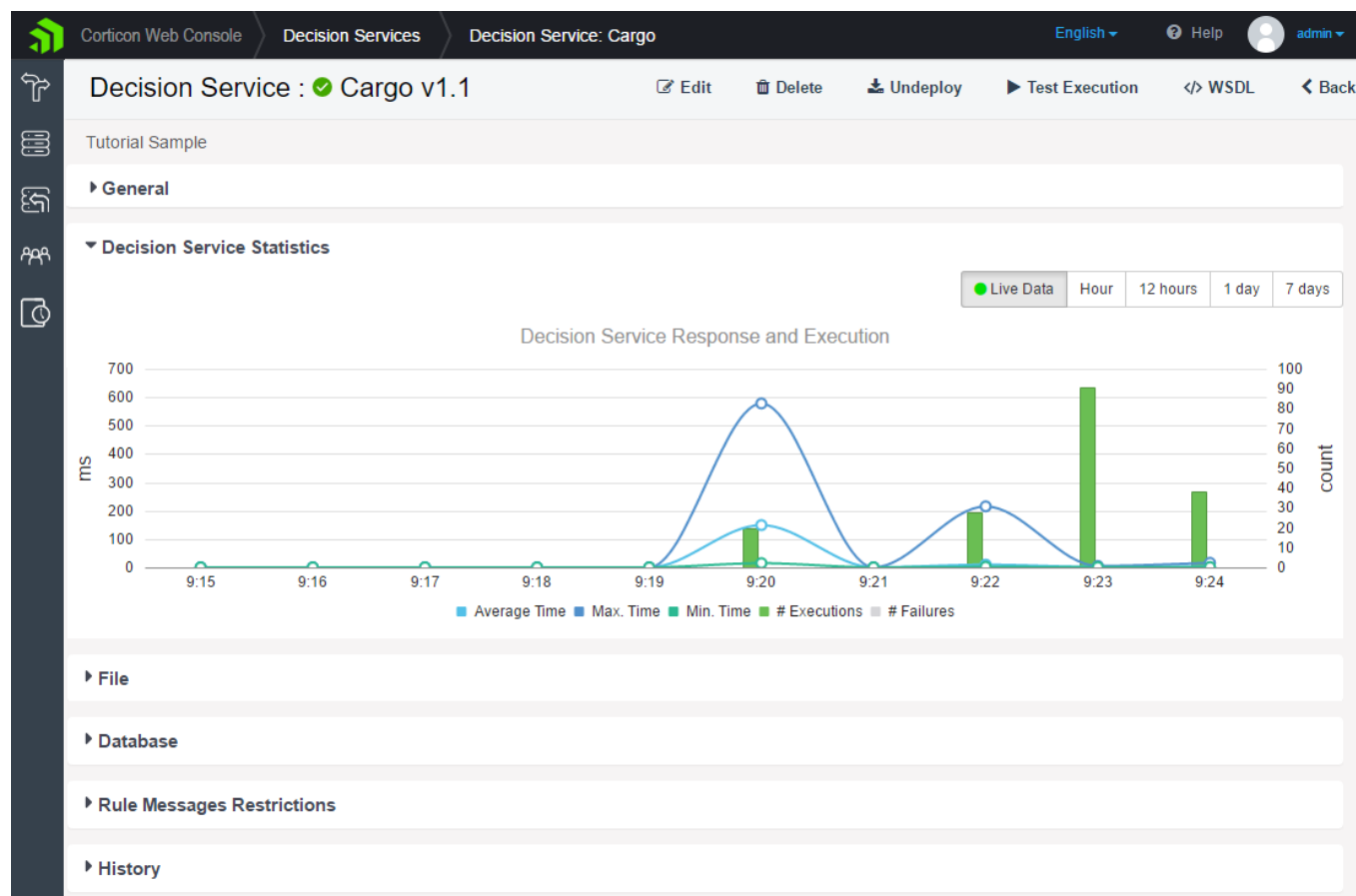
Note: These metrics are reset when a server restarts.

Decision Service Details

Click on a Decision Service to display its operational and performance data.

If the Decision Service is deployed to a Server Group, the operational and performance data is an aggregate of that Decision Service from all servers in the server group.

The actions available let you **Edit**, **Delete**, **Undeploy**, **Test Execution**, and display **WSDL**.



You can collapse and expand sections of the page to manage the display, as illustrated:

The screenshot shows the Corticon Web Console interface. The top navigation bar includes 'Corticon Web Console', 'Decision Services', and 'Decision Service: Freight1 v1.1'. The right side of the bar has 'English', 'Help', and a user profile 'admin'. Below the navigation bar, the main content area is titled 'Decision Service : Freight1 v1.1' and includes action buttons: 'Edit', 'Delete', 'Undeploy', 'Test Execution', 'WSDL', and 'Back'. The content is organized into several expandable sections:

- General**: Contains a table with deployment details.

Servers:	My Five	Execution Count:	0
Deployed:	Nov 1, 2016 6:55:29 PM	Failure Count:	0
Effective:		Average Time:	0 milliseconds
Expires:		Rule Count:	4
Auto Reload:	Yes	Last Execution Time:	Not Yet Executed
Maximum Pool Size:	1	Message Style:	Auto-detect
- Decision Service Statistics**: A section header for performance metrics.
- Monitored Attributes**: A section header for monitored data.
- File**: Contains file information.

Local File:	Cargo56.eds
EDS File Timestamp:	Oct 31, 2016 1:56:42 PM
- Database**: Contains database configuration.

Database Access Mode:	None	Database Entities Returned Mode:	ALL
Database Access Properties File:		Database Caching:	No
		Use Execution Recording Service:	No
- Rule Messages Restrictions**: Contains rule message settings.

Restrict Info Rule Messages:	System Default
Restrict Violation Rule Messages:	System Default
Restrict Warning Rule Messages:	System Default
- History**: Contains creation details.

Created On:	Oct 31, 2016 9:56:41 PM
Created By:	admin

Application Details

The general metrics shown for an application are a rollup of the metrics of the Decision Services in the Application. For example, the average execution time shown on an application is the average execution time of all its Decision Services.

Test Execution

The **Test Execution** option lets you test your Decision Service by making a REST or SOAP request to it. When you select the Test Execution, you choose a server where the Decision Service is deployed, whether to make a REST or SOAP request, and then locate a JSON or XML file for the payload of the request.

Note: While the Decision Service name is essential for Corticon requests, this panel ignores the `decisionServiceName` parameter in the request as it is focused on the current Decision Service.

To execute a test against a selected deployment of the current Decision Service :

1. Click **Server** to select a server that has the Decision Service deployed.
2. In the **Choose Request File** area, click **Choose File**, then locate and open an XML or JSON request appropriate for the Decision Service. The **Request** area shows the request text.
3. Choose its **Request Type**.
4. Click **Execute**.

The request executes, and then adds the **Response** text, as shown:

The screenshot displays the 'Test Execute: Cargo' interface in the Corticon Web Console. The top navigation bar includes 'Corticon Web Console', 'Decision Services', 'Application: Cargo', and 'Test Execution: Cargo'. The right side of the bar shows 'English', 'Help', and a user profile 'admin'. The main content area is titled 'Test Execute: Cargo' and features an 'Execute' button and a 'Back' link. Below the title, the 'Server' dropdown is set to 'NBBEDGSAINTMA1:8850/axis'. The 'Choose Request File' section has a 'Choose File...' link and a text box containing 'Sample.xml'. The 'Request Type' section shows 'REST/JSON' and 'SOAP/XML' options, with 'SOAP/XML' selected. The 'Request' text area contains an XML payload for a decision service named 'Cargo'. The 'Response' text area shows the resulting XML response from the service.

Server
NBBEDGSAINTMA1:8850/axis

Choose Request File [Choose File...](#)
Sample.xml

Request Type
☐ REST/JSON ☒ SOAP/XML

Request

```
<?xml version="1.0" encoding="UTF-8"?>
<CorticonRequest xmlns="urn:Corticon" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
decisionServiceName="InsertDecisionServiceName">
  <WorkDocuments>
    <Cargo id="Cargo_id_1">
      <weight>1000</weight>
      <volume>10</volume>
      <container xsi:nil="true" />
    </Cargo>
    <Cargo id="Cargo_id_2">
      <weight>1000</weight>
      <volume>40</volume>
      <container xsi:nil="true" />
    </Cargo>
    <Cargo id="Cargo_id_3">
      <weight>30000</weight>
      <volume>20</volume>
    </Cargo>
  </WorkDocuments>
</CorticonRequest>
```

Response

```
<?xml version="1.0" encoding="UTF-8"?><CorticonResponse xmlns="urn:Corticon" decisionServiceName="Cargo"
decisionServiceTargetVersion="1.1">
  <WorkDocuments>
    <Cargo id="Cargo_id_1">
      <container>standard</container>
      <volume>10</volume>
      <weight>1000</weight>
    </Cargo>
    <Cargo id="Cargo_id_2">
      <container>oversize</container>
      <volume>40</volume>
      <weight>1000</weight>
    </Cargo>
    <Cargo id="Cargo_id_3">
      <container>heavyweight</container>
      <volume>20</volume>
      <weight>30000</weight>
    </Cargo>
  </WorkDocuments>
</CorticonResponse>
```


WSDL

The **WSDL** option displays the current Decision Service's WSDL, and also provides a link to WSDL data in an editor:

The screenshot shows the Corticon Web Console interface. The top navigation bar includes 'Corticon Web Console', 'Decision Services', and 'Decision Service: Cargo'. The main content area displays the WSDL for the 'Cargo' service. The WSDL is shown in a modal window with the following XML content:

```
<?xml version="1.0" encoding="UTF-8"?><definitions xmlns="http://schemas.xmlsoap.org/wsdl/" targetNamespace="urn:Corticon">
  <types>
    <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:Corticon" elementFormDefault="qualified">
      <xsd:element name="CorticonRequest" type="tns:CorticonRequest"/>
      <xsd:element name="CorticonResponse" type="tns:CorticonResponse"/>
      <xsd:complexType name="CorticonRequest">
        <xsd:sequence>
          <xsd:element name="ExecutionProperties" maxOccurs="1" type="tns:ExecutionProperties" minOccurs="0"/>
          <xsd:element name="WorkDocuments" type="tns:WorkDocuments"/>
        </xsd:sequence>
        <xsd:attribute name="decisionServiceName" use="required" type="xsd:string" fixed="Cargo.eds"/>
        <xsd:attribute name="decisionServiceTargetVersion" use="optional" type="xsd:nonNegativeInteger"/>
        <xsd:attribute name="decisionServiceEffectiveTimestamp" use="optional" type="xsd:dateTime"/>
      </xsd:complexType>
      <xsd:complexType name="CorticonResponse">
        <xsd:sequence>
          <xsd:element name="ExecutionProperties" maxOccurs="1" type="tns:ExecutionProperties" minOccurs="0"/>
          <xsd:element name="WorkDocuments" type="tns:WorkDocuments"/>
          <xsd:element name="Messages" type="tns:Messages"/>
        </xsd:sequence>
        <xsd:attribute name="decisionServiceName" use="required" type="xsd:string" fixed="Cargo.eds"/>
        <xsd:attribute name="decisionServiceTargetVersion" use="optional" type="xsd:nonNegativeInteger"/>
        <xsd:attribute name="decisionServiceEffectiveTimestamp" use="optional" type="xsd:dateTime"/>
      </xsd:complexType>
      <xsd:complexType name="ExecutionProperties">
        <xsd:sequence>
          <xsd:element name="ExecutionProperty" maxOccurs="unbounded" type="tns:ExecutionProperty" minOccurs="0"/>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="ExecutionProperty">
        <xsd:sequence>
          <xsd:attribute name="executionPropertyName" use="required" type="xsd:string"/>
          <xsd:attribute name="executionPropertyValue" use="required" type="xsd:string"/>
        </xsd:sequence>
      </xsd:complexType>
    </xsd:schema>
  </types>
  <message name="CorticonRequest" type="tns:CorticonRequest"/>
  <message name="CorticonResponse" type="tns:CorticonResponse"/>
  <portType name="CorticonRequest" type="tns:CorticonRequest"/>
  <portType name="CorticonResponse" type="tns:CorticonResponse"/>
  <binding name="CorticonRequest" type="tns:CorticonRequest"/>
  <binding name="CorticonResponse" type="tns:CorticonResponse"/>
  <service name="CorticonRequest" type="tns:CorticonRequest"/>
  <service name="CorticonResponse" type="tns:CorticonResponse"/>
</definitions>
```

Below the WSDL, the console shows the 'Cargo v1.1 WSDL URL' as <http://NBBEDGSAINTMA5:8850/axis/dswsdl/Cargo/1/1>. The 'File' section shows the local file 'Cargo.eds' and the EDS File Timestamp 'Oct 17, 2016 4:24:24 PM'. The 'Database' section shows the Database Access Mode as 'None', Database Access Properties File, Database Entities Returned Mode as 'ALL', Database Caching as 'No', and Use Execution Recording Service as 'No'.

Monitored Attributes

The Web Console lets you monitor the value distribution of one or more attributes in a deployed Decision Service. By choosing attributes to monitor, you can view the statistical breakdown of attribute values over the course of many Decision Service executions.

For example, the Ruleflow created in the [Tutorial: Basic Rule Modeling in Corticon Studio](#) *Basic Rule Modeling tutorial* reads integer values for `Cargo.volume` and `Cargo.weight` in the request, and assigns a text value to the attribute `Cargo.container`. To monitor these attributes, select the name in the **Monitored Attribute** dialog, enter comma-separated values or value ranges in the **Analysis Buckets** entry area, and then click **Add**.

When you set *bucket* ranges of values, you can analyze categories of data. Bucketing is useful when a wide range of numeric or date data is possible. For this example, the three buckets for `Cargo.volume` are 1 to 30 kilos, 31 to 99 kilos, and greater than 99.

Entering no values can be useful for string values, especially when there is a small set of values defined in a Custom Data Type (such as `Cargo.container` in this example), or there is small set of known values, such as risk ratings `high`, `medium`, `low`.

The monitored attributes in this example are listed as shown:

Edit Decision Service

Decision Service
Database
Advanced
Monitored Attributes

Optionally select one or more attributes from a Decision Service to monitor to gain insight into it's processing.

Select or Search Attribute

Analysis Bucket

Add

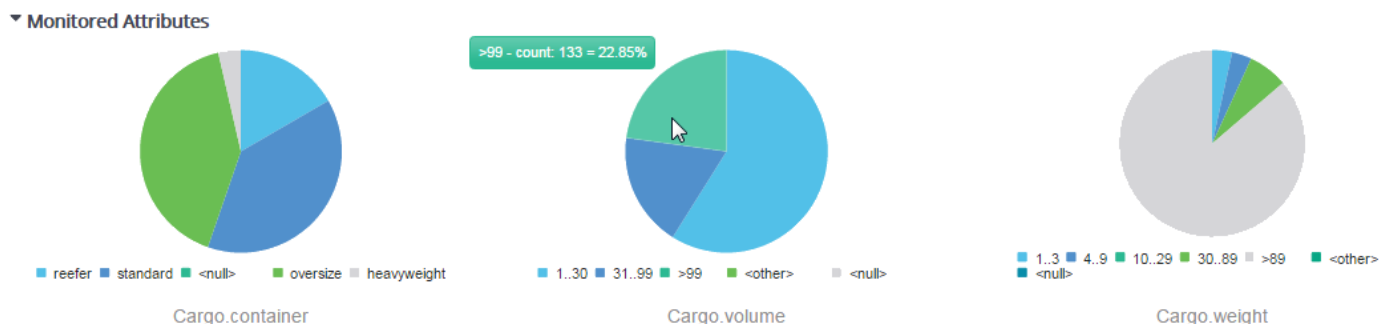
Attribute	Analysis Bucket	Actions
Cargo.container		<div>Remove</div>
Cargo.volume	1..30,31..99,>99	<div>Remove</div>
Cargo.weight	1..3,4..9,10..29,30..89,>89	<div>Remove</div>

Save

Cancel

Click **Save** to enable your selections.

In this example, the integer values are examined across narrower ranges than the rules, perhaps as a study to see whether new container categories should be considered. The results of attribute monitoring are visualized as follows:



Batch Configurations

Corticon Web Console lets you connect to remote Web Console servers that in turn connect to managed Corticon Servers where deployed Decision Services are defined that integrate with data sources. When these Decision Services use defined SQL batch queries linked through the Datasource, you can define batch configurations and run batch jobs.

As a result, you can ensure that high-volume rules-based processing occurs on a specified schedule.

Add Batch Configurations

To add batch configurations:

1. Connect to the Web Console server where you maintain batch configurations.

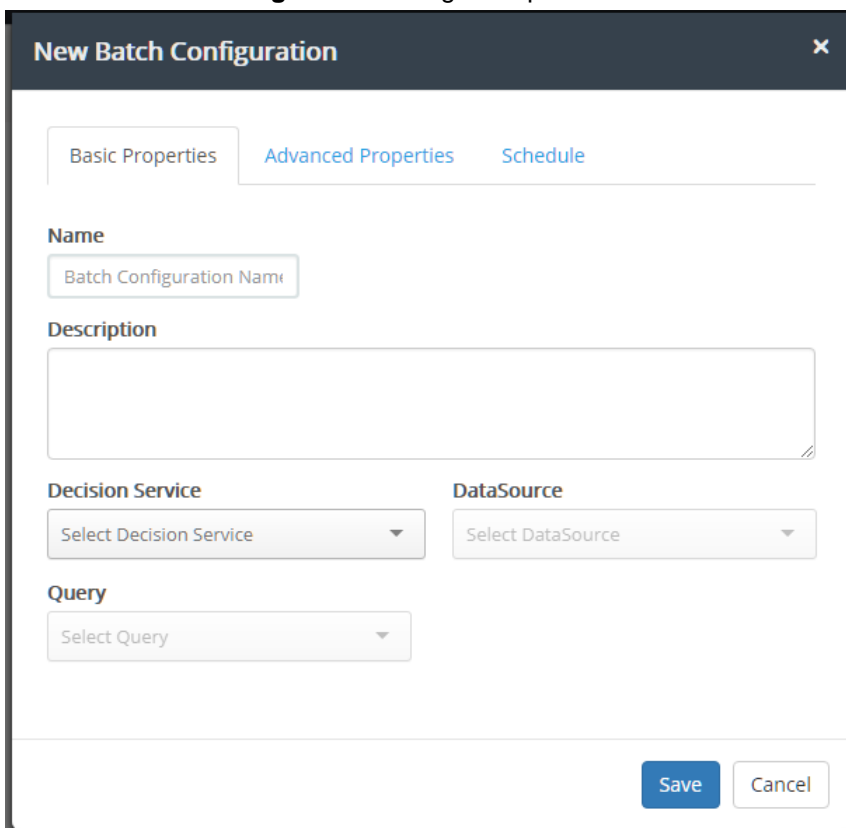
2. Click the **Batch configurations** button:



3. Click **+ New Batch Configuration**:

+ New Batch Configuration

4. The **New Batch Configuration** dialog box opens:

A screenshot of the 'New Batch Configuration' dialog box. It has a dark header bar with the title 'New Batch Configuration' and a close button. Below the header are three tabs: 'Basic Properties' (selected), 'Advanced Properties', and 'Schedule'. The 'Basic Properties' tab contains the following fields: 'Name' with a text input field containing 'Batch Configuration Name'; 'Description' with a large text area; 'Decision Service' with a dropdown menu showing 'Select Decision Service'; 'DataSource' with a dropdown menu showing 'Select DataSource'; and 'Query' with a dropdown menu showing 'Select Query'. At the bottom right are 'Save' and 'Cancel' buttons.

where:

- **Name** - Unique text that you want to use to refer to this configuration
- **Description** - Optional supporting text for the configuration

- **Decision Service** - List of managed, deployed Decision Services that have at least one component that has batch queries in its connected database.
- **Datasource** - The name of the Datasource connection that the Decision Service uses, as assigned in the Vocabulary.

For example, in an export configuration file named `myConfig.xml` where the first few lines are...

```
...
<decisionService>
  <datasources>
    <database useForQueryService="true" name="Patient Data">
      <connection-url>jdbc:progress:sqlserver://localhost:1433;
        databaseName=PatientRecords</connection-url>
```

...the **Datasource** value is `Patient Data`.

- **Query** - The name of the batch query stored in one of the Decision Service's connected databases

5. Click to access the **Advanced Properties** tab:

New Batch Configuration

Basic Properties | **Advanced Properties** | Schedule

Number of ID's per Fetch
1000

Entities per Payload
1

Number of Processing Threads
4

Log Path
c:\myBatchLogFolder ☒

Save Cancel

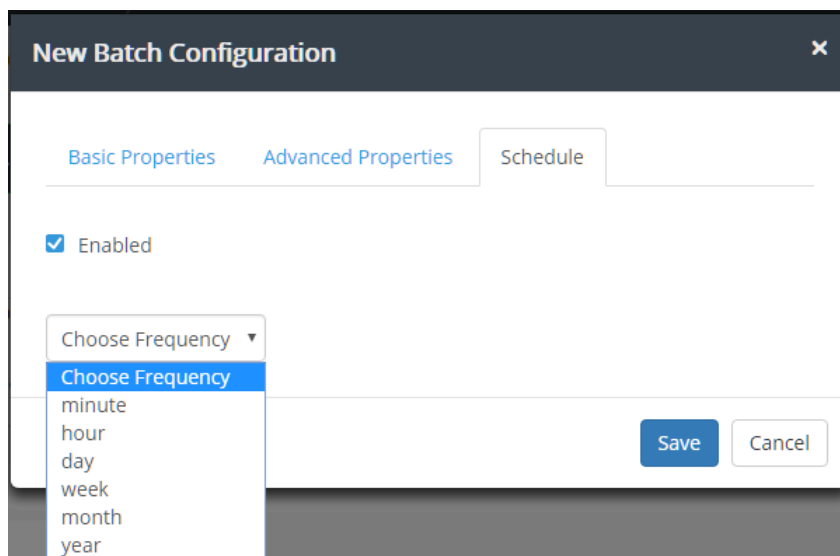
where:

- **Number of ID's per Fetch** - Number of Ids that will be retrieved by each Datasource Fetch. Default value is 1000.
- **Entities per Payload** - Number of entities that will be added to each payload sent to the Corticon Server execute method. Default value is 1.
- **Number of Processing Threads** - The number of execution threads the Corticon Server will spawn when executing the batch. The Default value is the number of cores on the Corticon Server's machine.
- **Log Path** - The folder that will store the logs produced for this batch configuration on the server that runs the batch process. Default location is `[CORTICON_WORK_DIR]\logs\`.

The log file name is set as `DecisionServiceName(Version)_Threads_Timestamp.log`. For example, `PatientUpdate(1.2)_4_1515014748084.log`

- **Logging enabled checkbox** - To the right of the **Log Path** entry, the checkbox lets you decide whether to do logging for this batch configuration.

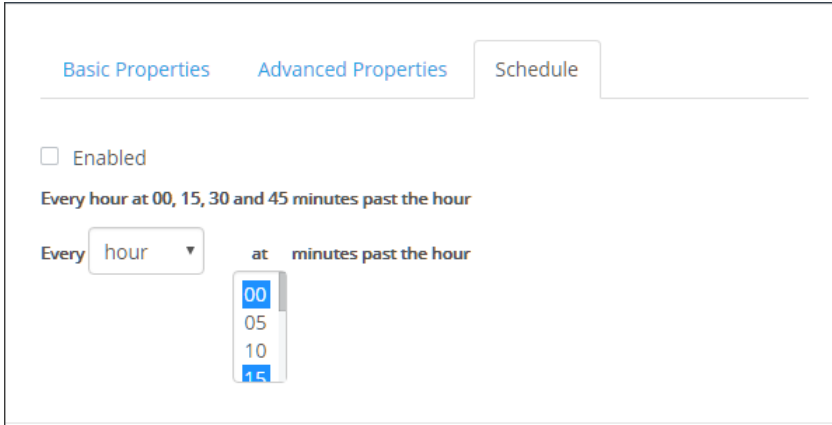
6. Click to access the **Schedule** tab:

The screenshot shows a 'New Batch Configuration' dialog box with three tabs: 'Basic Properties', 'Advanced Properties', and 'Schedule'. The 'Schedule' tab is selected. Inside the 'Schedule' tab, there is a checkbox labeled 'Enabled' which is checked. Below the checkbox is a dropdown menu labeled 'Choose Frequency'. The dropdown menu is open, showing a list of frequency options: 'minute', 'hour', 'day', 'week', 'month', and 'year'. At the bottom right of the dialog box, there are 'Save' and 'Cancel' buttons.

where:

- **Enabled** - Chooses to repeat the batch process with the frequency you specify.
- *Choose Frequency:*
 - **minute** - Once every minute.
 - **hour** - At specified minute past every hour.
 - **day** - At the specified time of every day.
 - **week** - At specified week day at the specified time of that day.
 - **month** - At specified day every month at the specified time of that day.
 - **year** - At specified day and month every year at the specified time of that day.

Note: On most of the frequency options, you can use Control+click to choose multiple values, as illustrated:




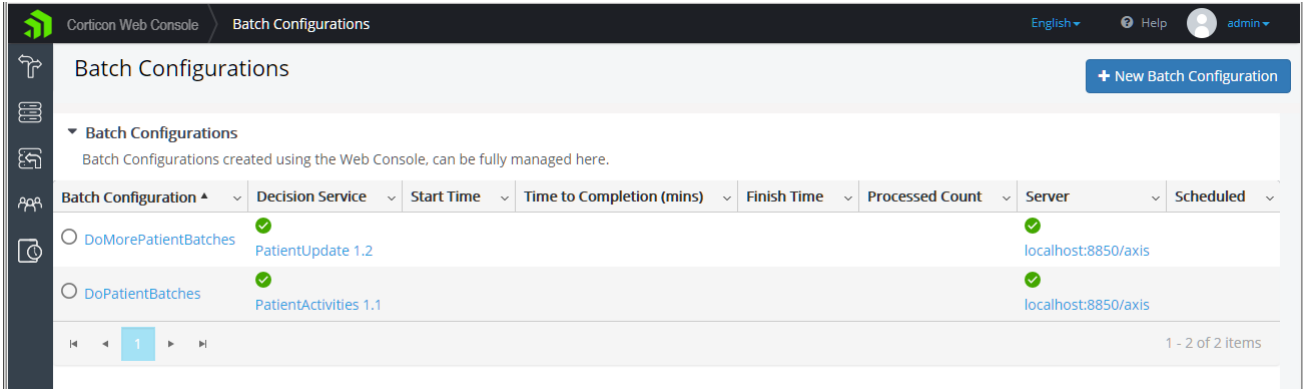
The screenshot shows a configuration window with three tabs: 'Basic Properties', 'Advanced Properties', and 'Schedule'. The 'Schedule' tab is active. It contains an 'Enabled' checkbox, which is currently unchecked. Below the checkbox, the text 'Every hour at 00, 15, 30 and 45 minutes past the hour' is displayed. Underneath this text, there is a frequency configuration section. It starts with the word 'Every', followed by a dropdown menu showing 'hour'. To the right of the dropdown is the word 'at', followed by a text input field containing 'minutes past the hour'. Below the 'at' text is a small calendar-like picker showing a list of minutes: '00', '05', '10', and '15'. The '15' option is currently selected and highlighted in blue.

7. Click **Save**.

Edit Batch Configurations

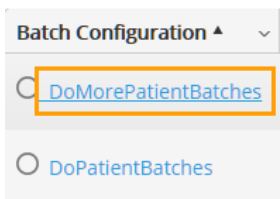
To maintain batch configurations:

1. Connect to the Web Console server where you maintain batch configurations.
2. Click the **Batch configurations** button:  The Batch Configuration page opens and displays the current batch configurations, as illustrated:

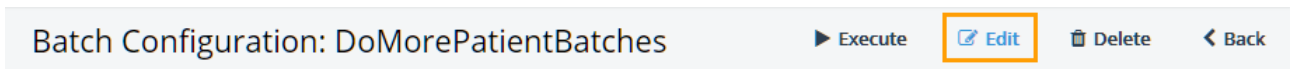


Batch Configuration	Decision Service	Start Time	Time to Completion (mins)	Finish Time	Processed Count	Server	Scheduled
<input type="radio"/> DoMorePatientBatches	PatientUpdate 1.2					localhost:8850/axis	
<input type="radio"/> DoPatientBatches	PatientActivities 1.1					localhost:8850/axis	

3. Click the Batch Configuration name you want to edit, as illustrated:




4. On the Details page, click **Edit**, as shown:

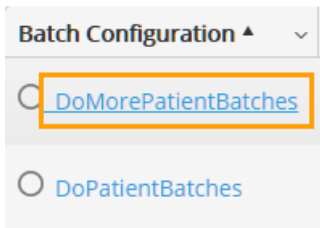


5. The **Edit Batch Configuration** dialog box opens.
6. Follow the steps for the dialog box as described in [Add Batch Configurations](#) on page 35
7. Click **Save**.

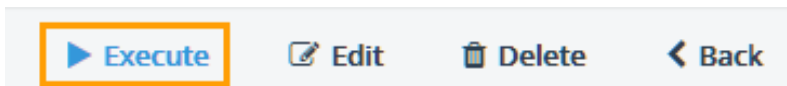
Run Batch Configurations

To run a batch configuration:

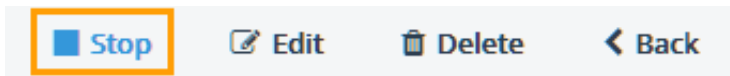
1. Connect to the Web Console server where you maintain batch configurations.
2. Click the **Batch Configurations** button:  The Batch Configuration page opens and displays the current batch configurations:
3. Click the Batch Configuration name you want to edit, as illustrated:



4. On the Details page, click **Execute**, as shown:



Note: When execution is running, you can terminate it by clicking **Stop**, as shown:



The job statistics show the time and counts of the most current run, as shown:

▼ Statistics

Start Time:	Jan 3, 2018 1:12:22 PM	Processed Count:	4
Finish Time:	Jan 3, 2018 1:12:23 PM	Retrieved Count:	4
Running Time:	0 mins		
Time to Completion:	0 mins		

The logs are produced on the server that ran the deployed Decision Service at the location you specified or the default location [CORTICON_WORK_DIR]\logs. The filename for each run is `DecisionServiceName(Version)_Threads_Timestamp.log`

Note: For an example of batch runs, see *"Getting Started with Batch" in the Data Integration Guide*.

How to view the Activity Log

Corticon Web Console maintains a log of its activities. The log includes:

- User actions such as deploying or undeploying Decision Services and creating or modifying Applications and Servers.
- System events such as deployment failures and lost connections to Servers.

To view the activity log:

1. Connect to the Web Console server where you want to view the Activity Log.

2. Click the **Activity Log** button:



The Activity Log page opens and displays the log in a three-column table:

The screenshot shows the 'Activity Log' page in the Corticon Web Console. The page has a dark header with the Corticon logo, 'Corticon Web Console', 'Activity Log', 'English', 'Help', and a user profile 'admin'. A sidebar on the left contains icons for navigation. The main content area has a title 'Activity Log' and a 'Configuration' button. Below the title are filters for User, Component, Action, and Status, all set to 'All'. There are also date range filters for 'From' (9/19/16) and 'To' (10/19/16). A 'Filter' button and a 'Page Size' dropdown (set to 10) are also present. The log table has three columns: Time, User Name, and Message. The table contains 12 rows of log entries, including successful connections, application removals, and deployment failures. At the bottom of the table, there is a pagination bar with links for 'First', 'Previous', '21', '22', '23', '24', '25', '26', '27', '28', '29' (selected), '30', 'Next', and 'Last'. Below the pagination bar, it says 'Page: 29 / 41'.

Time	User Name	Message
Oct 18, 2016 2:20:48 PM		✓ Connection to "NBBEDGSAINTMA5:8850/axis" established
Oct 18, 2016 2:20:48 PM		✓ Connection to "NBBEDGSAINTMA1:8850/axis" established
Oct 18, 2016 2:20:47 PM		✓ Connection to "localhost:8850/axis" established
Oct 18, 2016 2:05:06 PM	admin	✓ Application "nbbedmcicel2" successfully removed
Oct 18, 2016 2:04:37 PM	admin	✓ Server "nbbedmcicel2" successfully removed
Oct 18, 2016 2:04:36 PM	admin	✓ Decision Service "nbbedmcicel2" successfully undeployed from "nbbedmcicel2:8850/axis"
Oct 18, 2016 2:04:32 PM	admin	✓ Server "nbbedmcicel2_2" successfully removed
Oct 18, 2016 2:04:21 PM		✗ Connection to "nbbedmcicel2:8087/axis" failed
Oct 18, 2016 2:04:09 PM	admin	✓ Server nbbedmcicel2_2 successfully added
Oct 18, 2016 2:04:09 PM	admin	✗ Connection to "nbbedmcicel2:8087/axis" failed

Some log messages, such as those relating to failed deployment of Decision Services, have additional information about the problem that is not displayed in the table. To view this information, hover over a *Failed* log message, and then click on the information button at the end of that line. An alert opens with additional information on the issue.

You can filter the table to view a subset of the log messages. To do this, select the filters you want from the drop-down lists, and then click **Filter**. For example, to view all failed Decision Services deployments by a user, select the username from the **User** drop-down, select **Decision Service** in **Component**, select **Deploy** in **Action** and finally, select **Failed** in the **Status** drop-down. You can also add a date range to the filter to narrow the information to only log messages recorded between specified dates.

The screenshot displays the 'Activity Log' section of the Corticon Web Console. At the top, there are navigation tabs for 'Corticon Web Console' and 'Activity Log'. On the right, there are links for 'English', 'Help', and a user profile 'admin'. Below the navigation, there's a 'Configuration' button. The main area contains filter controls: 'User' (All), 'Component' (All), 'Action' (All), and 'Status' (Failed). A 'Filter' button and 'Page Size' (10) are also present. A date range selector shows 'From 9/19/16' and 'To' with a calendar icon. A dropdown menu for 'Status' is open, showing 'All', 'Successful', and 'Failed'. Below the filters is a table with the following data:

Time	User Name	Message
Oct 18, 2016 5:12:48 PM		Connection to "NBBEDGSAINTMA5:8850/axis" failed
Oct 18, 2016 5:09:33 PM		Connection to "NBBEDGSAINTMA1:8850/axis" failed
Oct 18, 2016 2:04:21 PM		Connection to "nbbedmcicel2:8087/axis" failed
Oct 18, 2016 2:04:09 PM	admin	Connection to "nbbedmcicel2:8087/axis" failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA1:8850/axis" Failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA1:8850/axis" Failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA1:8850/axis" Failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA1:8850/axis" Failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA5:8850/axis" Failed
Oct 18, 2016 2:04:06 PM	admin	Execute of Decision Service "Cargo" on "NBBEDGSAINTMA1:8850/axis" Failed

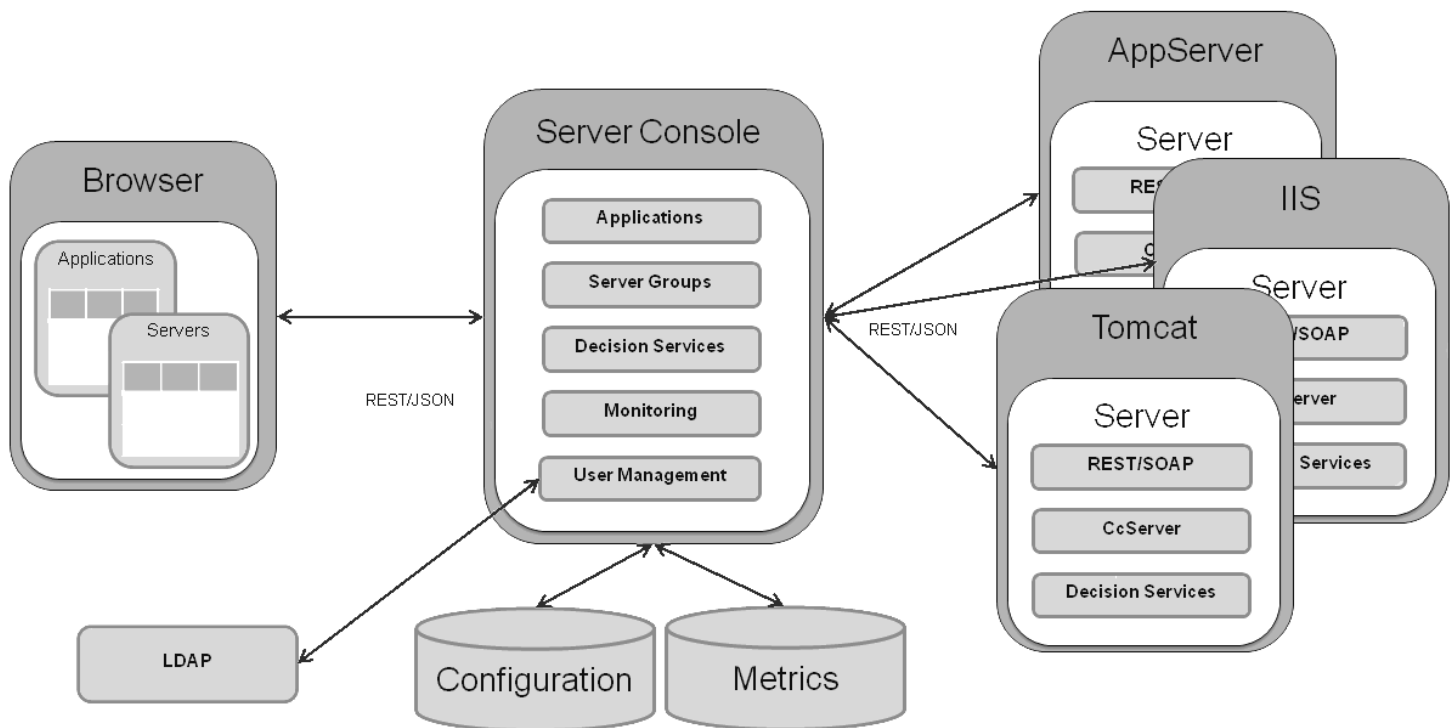
At the bottom of the table, there are pagination controls: 'First', 'Previous', '1', '2', 'Next', 'Last'. Below this, it says 'Page: 1 / 2'.

The Web Console maintains this log for a configurable period of time. This setting is visible only to Web Console Administrators. To know more about configuring the Activity Log, see the topic [Configure the Activity Log](#) on page 47.

Administrator Guide

Architecture Overview - The Web Console is a separate web application (`corticon.war`) from the Corticon Server (`axis.war`), deployable to either the same or separate application server as the Corticon Server.

When managing a group of Corticon Servers the recommended practice is to deploy the Web Console to a separate application server as depicted in this diagram:



Key aspects of this diagram:

- There is a single application server hosting the Web Console and three application servers hosting Corticon Servers. The Web Console is agnostic to the application server hosting a Corticon Server, this includes a mix of Java and Corticon Server for .NETs.
- REST/JSON is used for communication between the browser and the Web Console and between the Web Console and the Corticon Server.
- The Web Console stores all configurations locally. This includes definition of server groups, applications, and Decision Services (including the EDS file).
- The Web Console stores historical metrics locally. A retention policy will be supported for determining how long to keep historical metrics.

Installation

The Corticon Java and Corticon Server for .NET installers are in one installer, together with the new Web Console. See the *Corticon Installation Guide* for more information. See the Progress Software web page [Corticon 6.1 - Supported Platforms Matrix](#) to review the currently supported browsers, platforms and application servers.

For details, see the following topics:

- [User management](#)
- [Configure the Activity Log](#)
- [Configure auto logout](#)
- [Reset the administrator password](#)
- [Web Console server properties](#)

User management

The Web Console provides secure access. The administrator (User Name `admin`) is a preset user that cannot be deleted. You can change the administrator's password -- that's a task you should do as soon as you get started with the Web Console and take the administrator's role.

The administrator is the only user that can access user management to create, edit, and delete other users. Note that the case matters in the user name and password.

To display users:

1. Connect to the Web Console server as `admin` where you want to manage users.

2. Click the **Users** button:  The Users page opens:

The screenshot shows the 'Users' management page in the Corticon Web Console. The top navigation bar includes the Corticon logo, 'Corticon Web Console', 'Users', 'English', 'Help', and a user profile 'admin'. The main content area has a 'Users' header with '+ New User' and 'Configuration' buttons. Below is a table with columns: Name, Full Name, Email Address, and LDAP/AD User. The table contains one entry for 'admin' with the full name 'Web Console Administrator' and a red 'x' in the LDAP/AD User column. A pagination bar at the bottom shows '1' and '1 - 1 of 1 items'.

Name	Full Name	Email Address	LDAP/AD User
admin	Web Console Administrator		

To create new users, click **+ New User**, and then enter the user information and click **Save**:

The screenshot shows the 'New User' form in the Corticon Web Console. The top navigation bar includes the Corticon logo, 'Corticon Web Console', 'Users', 'Profile', 'English', 'Help', and a user profile 'admin'. The main content area has a 'New User' header. The form contains four input fields: 'User Name' (ahamilton), 'Password' (masked with dots), 'Full Name' (Alexander Hamilton), and 'Email Address' (ahamilton@history.gov). At the bottom are 'Save' and 'Cancel' buttons.

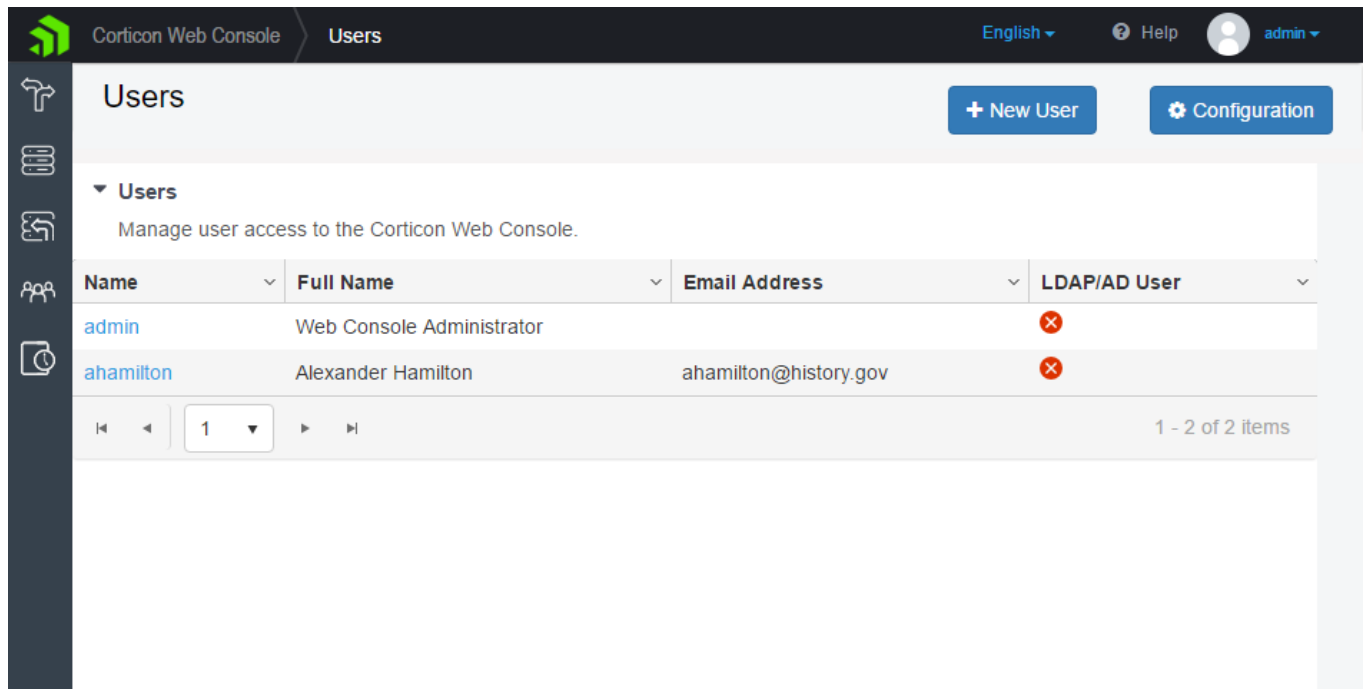
User Name: ahamilton

Password:

Full Name: Alexander Hamilton

Email Address: ahamilton@history.gov

Save Cancel



How to use LDAP for Web Console authentication

You can also set up LDAP authentication, if business needs require your users to be authenticated through an LDAP server. After LDAP authentication is set up, LDAP users who log in to the Web Console are added to the **Users** page. LDAP users are differentiated from other users by the **LDAP/AD** annotation. Note that while LDAP users can be deleted from the **Users** page, their details cannot be modified in the Web Console.

To configure LDAP authentication, edit the file `CorticonServerConsoleConfig.groovy` located in `[CORTICON_WORK_DIR]\etc`.

Uncomment all property lines in this file and enter values for the first four properties. Here is an example:

```
/*Configure the manager distinguished name based on your ldap configuration*/
grails.plugin.springsecurity.ldap.context.managerDn = 'uid=admin,ou=system'

/*Ldap password*/
grails.plugin.springsecurity.ldap.context.managerPassword = 'secret'

/*Ldap server url */
grails.plugin.springsecurity.ldap.context.server = 'ldap://localhost:10389'

/*Ldap search base*/
grails.plugin.springsecurity.ldap.search.base = 'o=mojo,ou=groups'
```

To map Web Console Admin and User roles to LDAP user groups, specify the user group names in the `ldap{ }` section at the bottom as shown. Use commas to define multiple user groups for each role.

```

corticon
{
  ldap {
    admin = "Admin,DBAdmin"
    users = "User,Analyst,Developer"
    authenticateUsersWithGroups = "false" //This flag is used to
    authenticate the Admin and User groups listed above. If the flag is
    false, and the group is not listed above, the user will be defaulted
    to user role.
  }
}

```

After setting these properties, save the file and restart Corticon Server. LDAP users can log then in to Web Console using their LDAP user credentials. Once an LDAP user logs in, they are added to the **USERS** page in Web Console.

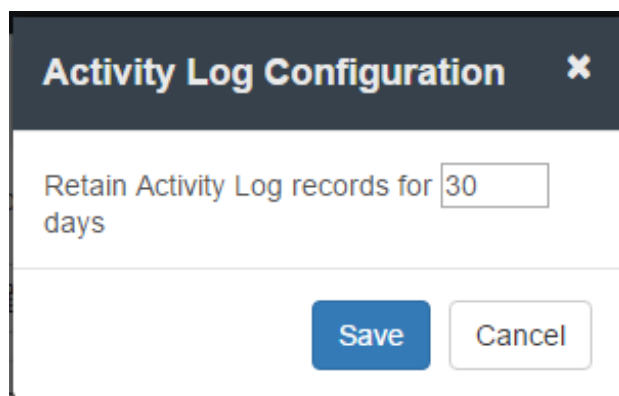
Note: Setting up LDAP authentication adds LDAP users to the Web Console user base. You can add other users in the **USERS** page and have them access Web Console using their Web Console user credentials.

Configure the Activity Log

Corticon Web Console maintains a log of its activities. The log includes:

- User actions such as deploying or undeploying Decision Services and creating or modifying Applications and Servers.
- System events such as deployment failures and lost connections to Servers.

A Web Console Administrator can view the Activity Log as well as configure the duration for which Corticon Web Console maintains log records. To view the Activity Log, click **ACTIVITY LOG** on the left pane. To configure the duration for which Web Console keeps log records, click **Configuration** on the Activity Log page and set the number of days for which Web Console maintains log records.

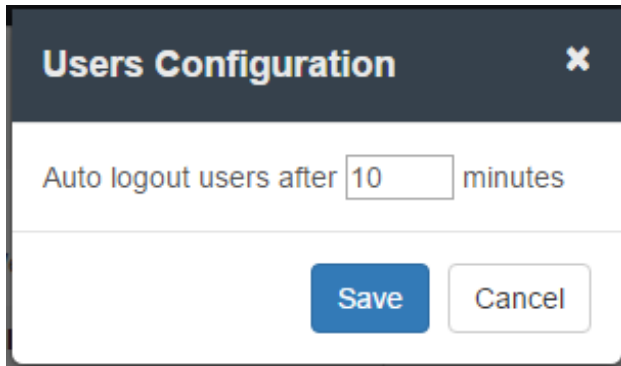
A screenshot of the 'Activity Log Configuration' dialog box. The dialog has a dark header with the title 'Activity Log Configuration' and a close button (X). The main area is white and contains the text 'Retain Activity Log records for' followed by a text input field containing the number '30' and the word 'days' below it. At the bottom of the dialog are two buttons: 'Save' (blue) and 'Cancel' (white with a grey border).

To know more about viewing and filtering the Activity Log, see the topic [How to view the Activity Log](#) on page 41.

Note: The Web Console Activity Log is different from a Server log, which logs user actions, system events, and other information for a specific instance of Corticon Server based on configurable log levels.

Configure auto logout

As part of user management, you can define a period of inactivity (in minutes) after which a user is automatically logged out of the Web Console. To configure this setting, click **Configuration** on the **Users** page. In the **User Configuration** dialog box, enter the duration of inactivity, as shown below:



Reset the administrator password

If the login password of the Web Console administrative user (`admin`) is lost, Corticon provides a way to reset the password to the default (also `admin`).

To reset the administrator's password:

1. Stop the Corticon Server that is running the Web Console.
2. Select **Start > Progress > Corticon 6.x Command Prompt**.
3. Enter `set JAVA_OPTS=-DCORTICON_RESET_ADMIN_PASSWORD=true`.
4. Enter `Server\tomcat\bin\startup.bat`.

Corticon Server starts and resets the administrator's password.

After completing these steps, you can connect the Web Console and log in with the default administrator credentials, user `admin`, password `admin`. It is good idea to immediately replace the default password with your preferred administrator password.

This procedure applies to the application server that is installed by Corticon Server, Apache Tomcat. You can perform similar steps for other supported application servers and platforms. Consult your application server documentation for how to pass the JVM system property `CORTICON_RESET_ADMIN_PASSWORD` to the server.

Note: Do not set this property in startup scripts as it will reset the password on each startup. This should be only done only when the password needs to be reset. Subsequent launches of Corticon Server and the Web Console should use the normal startup procedures.

Web Console server properties

The following properties are settings you can apply to your Web Console Server installation by adding the properties and appropriate values as lines in its `brms.properties` file, and then restarting Server. The effect of these settings will be realized by users of the Web Console browser clients connected to this Web Console server.

Property related to monitoring execution times of Decision Service - Version over defined interval periods. Specifies whether the Server will auto-start recording time interval measurements.

Note: The time interval monitoring service can be shutdown and restarted using the following methods, which will override this setting.

- `ICcServer.stopServerExecutionTimesIntervalService()`
- `ICcServer.startServerExecutionTimesIntervalService()`

Default value is `true`

```
com.corticon.server.monitoring.decisionservice.interval.record.times=true
```

Property related to Decision Service - Version level monitoring. Specifies whether the Server will auto-start recording time measurements.

Note: The data recording monitoring service can be shutdown and restarted using the following methods, which will override this setting.

- `ICcServer.stopServerResultsDistributionMonitoringService()`
- `ICcServer.startServerResultsDistributionMonitoringService()`

Default value is `true`

```
com.corticon.server.monitoring.decisionservice.record.data=true
```

