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# Web Agent Manager (WAM) User Guide

December 2018

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# About NetIQ Corporation

We are a global, enterprise software company, with a focus on the three persistent challenges in your environment: Change, complexity and risk—and how we can help you control them.

## Our Viewpoint

### **Adapting to change and managing complexity and risk are nothing new**

In fact, of all the challenges you face, these are perhaps the most prominent variables that deny you the control you need to securely measure, monitor, and manage your physical, virtual, and cloud computing environments.

### **Enabling critical business services, better and faster**

We believe that providing as much control as possible to IT organizations is the only way to enable timelier and cost effective delivery of services. Persistent pressures like change and complexity will only continue to increase as organizations continue to change and the technologies needed to manage them become inherently more complex.

## Our Philosophy

### **Selling intelligent solutions, not just software**

In order to provide reliable control, we first make sure we understand the real-world scenarios in which IT organizations like yours operate — day in and day out. That's the only way we can develop practical, intelligent IT solutions that successfully yield proven, measurable results. And that's so much more rewarding than simply selling software.

### **Driving your success is our passion**

We place your success at the heart of how we do business. From product inception to deployment, we understand that you need IT solutions that work well and integrate seamlessly with your existing investments; you need ongoing support and training post-deployment; and you need someone that is truly easy to work with — for a change. Ultimately, when you succeed, we all succeed.

## Our Solutions

- ◆ Identity & Access Governance
- ◆ Access Management
- ◆ Security Management
- ◆ Systems & Application Management
- ◆ Workload Management
- ◆ Service Management

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# 1 Get started

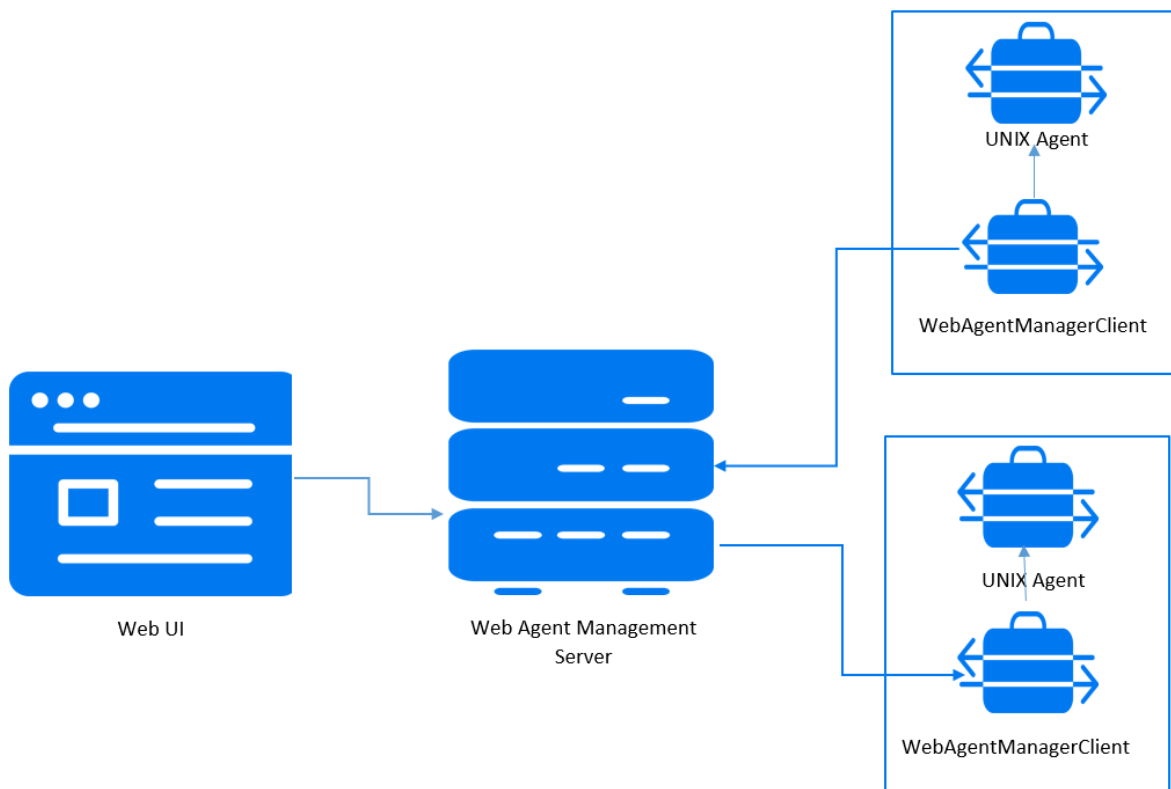
Web Agent Manager (WAM) is a web-based tool that allows you to configure all your AppManager UNIX agent components across the network, which you want to monitor with AppManager, without interacting with the UNIX agents individually.

Following are the salient features of WAM:

- ♦ Includes a unified web console to manage AppManager UNIX agents.
- ♦ Runs on Windows and Linux operating systems.
- ♦ Includes user access control and patch management.

## 1.1 Architecture

WAM has a multi-tiered architecture, which manages AppManager UNIX Agents. You can understand the working of WAM from the architectural image shown below.



The WAM server is hosted on Apache Tomcat on Linux or Windows machine. The WAM clients are installed on the UNIX agent machines. Through the Web UI, the UNIX agents are added to the WAM server. The WAM client starts talking with the server at an interval of 30 seconds, and fetches any task that is available for it to execute.

## 1.2 Key Processes of WAM

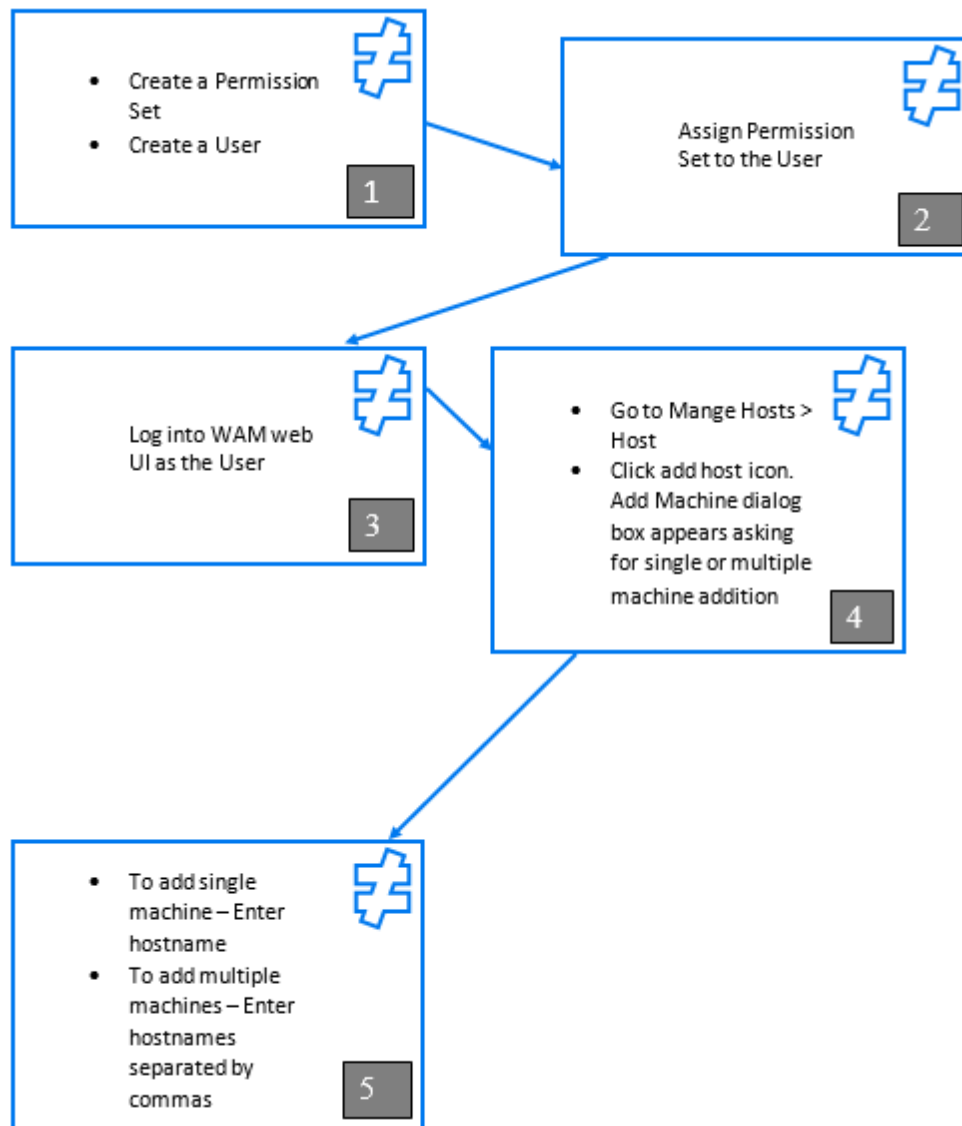
Process	Description
UNIX agent	<ul style="list-style-type: none"><li>◆ The process that AppManager for UNIX uses to run Knowledge Script jobs.</li><li>◆ This process should run continuously once the agent is installed and configured to be used with AppManager.</li></ul>
WAM client (WebAgentManagerClient)	<ul style="list-style-type: none"><li>◆ The process that the WAM server talks to.</li><li>◆ WAM client sends the heartbeat to WAM server every 30 seconds (configurable parameter) and fetches any task that is available for it to execute, and updates the server appropriately.</li><li>◆ WAM Server uses 2-way TLS authentication to authenticate WAM client.</li><li>◆ Either a self-signed certificate created using the generateWAMCertificates(*.sh or *.bat) scripts or commercially signed certificates for 2-way TLS communication can be used.</li><li>◆ UNIX OS 7.8.0.2 ships the UNIX_WAMAgentConfiguration KS for configuring WebAgentManagerClient.</li><li>◆ As of now PKCS12(*.p12) file format alone is supported by WAM client for certificates and keys.</li></ul>
WAM server	<ul style="list-style-type: none"><li>◆ The application which manages all the UNIX agents added to the WAM server. To manage an agent, it has to be added to a WAM server using Web UI.</li><li>◆ WAM Server exposes REST endpoints to manage it remotely using any other client in future.</li><li>◆ WAM server issues a token for every user who does Sign-In/Sign-Up. The token is valid till the expiry of the token. The token expiry is configurable using the XML element "TokenExpiry" in web.xml. Token is provided by server to talk to WAM server in case REST endpoints are used. Token can be found in WAM server log in Tomcat's log directory or in the web browser's console by enabling the log level to 5 (logger.level=5).</li><li>◆ WAM server uses the embedded Derby DB to store the machine details.</li></ul>



Process	Description
Web UI	<ul style="list-style-type: none"> <li>♦ Web UI can be used to access the services exposed by WAM server.</li> <li>♦ User session is valid till the expiry of token.</li> <li>♦ Admin is the user who can do Sign Up and creates and manages other user's profiles.</li> <li>♦ Other users can perform host management, user profile updation, and running of patches on UNIX machine based on their permission set.</li> </ul>

## 1.3 Use case

How to add single or multiple UNIX agents with the WAM Server





# 2 Install

This section provides an overview of the WAM installation process and describes the recommended order of installation.

WAM works on a client-server paradigm. Installation of WAM involves installation of WAM client and WAM server, and selection of an appropriate browser.

## 2.1 Prerequisites for Installing WAM

Following are the prerequisites for installation of WAM:

### 2.1.1 WAM server

Choose one of the following:

Server	Version
Apache Tomcat	7, 8, or 9
Oracle JRE	8 or 10
OpenJDK	8, 9, or 10

### 2.1.2 WAM client

Choose one of the following:

Client	Version
Oracle JRE	8 or 10
OpenJDK	8, 9, or 10

### 2.1.3 Browser

Choose one of the following:

Browser	Version
Internet Explorer	11
Google Chrome	70.0.3
Mozilla Firefox	62

## 2.2 Install the WAM server on Linux or Windows

The WAM server is a web based application in WAR format and is bundled with WebAgentManager.8.0.zip.

To install the WAM server:

1. Install Oracle JRE or OpenJDK
2. Install Apache Tomcat
3. Copy the WAMServer 8.0.X.war file to webapps folder in tomcat installation or use tomcat deployment manager (Tomcat Web Manager App) to deploy WAMServer
4. Restart the Apache Tomcat application
5. Go to the WAM Server URL using `https://<IP Address>:<Port>/WAMServer.8.0.X` or via Tomcat Web Manager App.

## 2.3 Install the WAM client

The WAM client is a jar file and is bundled inside the patch in UNIX OS 7.8.0.2.

To install the WAM client:

1. Apply agent patch 8.1.0.17 for UNIX agents 8.1, and 8.2.0.3 for UNIX agents 8.2 respectively using UAM.
2. Reconfigure UNIX agent using UAM or wcAppManConfig.

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**IMPORTANT:** Under UAM, go to Configure > AppManager Options > Configure AM > Save

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3. Run the WAMAgentConfiguration KS on the UNIX Agent machine to configure the WAM client.
4. To configure WAM agent, refer to [WAMAgentConfiguration](#).

## 2.4 WAMAgentConfiguration

Use this Knowledge Script to configure WAM client to connect to the WAM server.

### 2.4.1 Resource Object

UNIX computer icon.

### 2.4.2 Default Schedule

By default, this script is only run once for each computer.

### 2.4.3 Setting Parameter Values

Set the following parameters as needed:

Parameter	How to Set It
<b>General Setting</b>	

Parameter	How to Set It
<b>Do you want to configure the parameter?</b>	Set to <b>Yes</b> to configure the parameter. The default is No.
WAM Server address Hostname/IP	Set the WAM server Hostname or IP address.
WAM Server port	Set the port number of the WAM server.
WAM server application name	Set the name of the application, which the WAM server is running.
Heart Beat interval	Set a Heart Beat interval, at which the script must run. The default value is 30 seconds.
<b>CA Certificates Configuration</b>	
If you do not have organizational certificates, generate your own certificates by referring to <a href="#">Certificate Generation</a>	
Truststore file location	Set the location of truststore file.
Password for truststore	Set the password for truststore.
<b>Private key Configuration</b>	
KeyStore file location	Set location of Keystore file.
Password for KeyStore	Set password for KeyStore.
Event severity when job fails	Set the event severity level to indicate the importance of the event when job fails.
Enable debugging?	Set to <b>Yes</b> to enable debugging. The default value is No.
<b>Raise event if AppManager fails to get metrics?</b>	Set to <b>Yes</b> to raise an event if AppManager fails to get a metric. The default is Yes.
Event severity	Set the event severity level to indicate the importance of the event.
<b>Event Settings</b>	
<b>Raise event when succeeds?</b>	Set to <b>Yes</b> to raise an event when event setting becomes successful. The default value is No.
Event severity when succeeds	Set the event severity level to indicate the importance of the event.

After you have set all the required value, drag and drop the Knowledge Script (KS) on the UNIX Agent machine(s).

## 2.5 Certificate Generation

You can create self-signed certificates for WAM using the generateWAMCertificates.sh on Linux or generateWAMCertificates.bat on Windows. You can find the files inside the WebAgentManager.8.0.zip under the 'scripts' folder.

## 2.5.1 Certification Generation for Windows Platform

To generate certificates for Windows platform:

1. Set the environment variable PATH to JRE bin directory as shown below before running the windows batch script

Example: `set PATH=%PATH%;C:\Program Files\Java\jre1.8.0_121\bin`

2. Run `generateWAMCertificates.bat` file to generate self-signed certificates. The script guides you through the process.

## 2.5.2 Certificate Generation for Linux Platform

To generate certificate for Linux platform:

1. Set the environment variable PATH to JRE bin directory as shown below before running the linux shell script.

Example: `export PATH=$PATH:/jre-8.0/bin`

2. Run `generateWAMCertificates.sh` file to generate self-signed certificates. The script guides you through the process.

You can also run `generateWAMCertificates.sh` silently by using `'-s'` option followed by the silent config file as shown below

Example: `generateWAMCertificates.sh -s WAMCertSilent.cfg`

The sample `WAMCertSilent.cfg` is present under the `'scripts'` folder as well.

Note that `'-s'` option is only supported on Unix/Linux platforms currently.

# 3 Administer

This section provides a detailed description about how as an administrator you can perform Sign Up and manage user profile in WAM.

## 3.1 Sign Up

As an administrator, you need to Sign Up.

To Sign Up:

1. Launch the WAM URL `https://<IP Address>:<Port>/WAMServer.8.0.X/`
2. Sign Up page is displayed.
3. Enter the username, password, confirm password, and then click on Sign Up.
4. Redirect to WAM home page.
5. Later admin user can create multiple users.

## 3.2 Access control

Access control is the administrative tool for WAM. A user is grouped under a permission set. Permission set determines what a user is authorized to carry out:

Access Control enables you to:

- ♦ Create, delete, and edit a user.
- ♦ Create, delete, and edit a permission set.

### 3.2.1 Create user

You can create a user and assign a permission set to the user simultaneously or subsequently after creating the user.

To create user:

1. Do one of the following:
  - ♦ Go to Access Control > Admin Console > Home, and under the **USERS** section, click Create User link.
  - ♦ Go to Access Control > Admin Console > User and click **Add User** icon
2. Under **GENERAL**, enter user details.

Note the following while entering the details:

- ♦ User Name: No special character or white space is allowed. Not to exceed 32 characters.
- ♦ First Name: No special character is allowed. Alphanumerics and white spaces are allowed. Not to exceed 32 characters.
- ♦ Last Name: No special character is allowed. Alphanumerics and white spaces are allowed. Not to exceed 32 characters.

- ◆ Password: Minimum 8 characters and maximum 256 characters.
  - ◆ Confirm Password: Minimum 8 characters and maximum 256 characters.
3. Under **PERMISSION SETS**, select permission sets from **Available Permission Sets** to assign a permission set to the user simultaneously while creating the user.
    - ◆ To assign a single permission set, select **Available Permission Sets** from the dropdown permission sets.
    - ◆ To assign multiple permission set, click the **more** icon. A right-sided pane appears. Click on the permission set from the list of permission sets. Click **SAVE**.

To assign permission sets subsequently after creating the user:

1. Go to Access Control > Admin Console > User
2. Under **USERS**, either hover mouse or click over the desired user. On clicking the user, an **edit** icon appears in the toolbar, and on hovering, the **edit** icon appears on the right side of the selected user. Click the **edit** icon.
3. Under **PERMISSION SETS**, click **more** icon. A right-sided pane appears. Click on the permission set or sets and click **SAVE**.

## 3.2.2 Create permission sets

You can create a permission set and assign a user to the permission set simultaneously or subsequently after creating the permission set.

To create a permission set:

1. Do any of the following:
  - ◆ Go to Access Control > Admin Console > Home, and Under **PERMISSION SETS** section, click **Create Permission Sets** link.
  - ◆ Go to Access Control > Admin Console > Permission Set, and click on **Add PermissionSet** icon.
2. Under **GENERAL**, enter Permission Set Name and Description.
 

Note the following while entering the details

  - ◆ Name: No special character is allowed. Alphanumerics and white spaces are allowed. Not to exceed 32 characters.
  - ◆ Description: No special character is allowed. Alphanumerics and white spaces are allowed. Not to exceed 32 characters
3. Under **PERMISSIONS**, select the permission checkboxes.
4. Under **USERS**, select users from the Available Permission Set Members to assign a user to the permission sets simultaneously while creating the permission set.
  - ◆ To assign a single user, select a user from the dropdown Available Permission Set Members.
  - ◆ To assign multiple users, click **more** icon. A right-sided pane appears. Click on the user or users to choose from the list of users. Click **SAVE**.

To assign users subsequently after creating the permission set:

1. Go to Access Control > Admin Console > Permission Set
2. Under **EDIT PERMISSION SETS**, either hover mouse or click over the desired permission sets. On clicking the permission set, an **edit** icon appears in the toolbar, and on hovering, the **edit** icon appears on the right side of the selected permission set. Click the **edit** icon.



3. To change permission for the permission set, select or deselect the checkboxes under **PERMISSION**.
4. Select **more** icon under **PERMISSION SET MEMBERS**. A right-sided pane appears. Click the desired user or users and click **SAVE**.

### 3.2.3 Edit user

To edit user:

1. Go to Access Control > Admin Console > User
2. Under **USERS**, either hover mouse or click over the desired user. On clicking the user, an edit icon appears in the toolbar, and on hovering, the edit icon appears on the right side of the selected user. Click the **edit** icon.
3. User edit page opens up. You can do the following edits:
  - ◆ User profile: You can edit user First Name and Last Name. Note the following while editing:
    - ◆ First Name: No special character is allowed. Alphanumeric and white spaces are allowed. Not to exceed 32 characters.
    - ◆ Last Name: No special character is allowed. Alphanumeric and white spaces are allowed. Not to exceed 32 characters.
  - ◆ Password reset:
    - ◆ Click on **Reset Password** link.
    - ◆ Enter New Password and confirm by entering **Confirm Password**. Note that password can have a minimum 8 characters and a maximum 256 characters.
    - ◆ Click **SAVE**.

---

**NOTE:** On three unsuccessful attempts, your account will be locked. Contact your admin to reset the password.

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  - ◆ User permission set
    - ◆ Remove permission sets: Hover the mouse on the user name under **ASSIGNED PERMISSION SETS**, a **Remove** icon appears on the right hand side of the selected user. Click the **Remove** icon.
    - ◆ Add permission sets: Click on **more** icon under **Add Roles to the User**, a right-sided pane appears. Click on the permission set or sets to choose from the list of permission sets. Click **SAVE**.

### 3.2.4 Edit permission set

To edit permission set:

1. Go to Access Control > Admin Console > Permission Set
2. Under **PERMISSION SETS**, either hover mouse or click the desired permission set. On clicking the permission set, an edit icon appears in the toolbar, and on hovering, the edit icon appears on the right side of the selected permission set. Click the **edit** icon.
3. Edit Permission Set page opens up. You can do the following edits:
  - ◆ Permission: To change permission for the permission set, select or deselect the checkboxes under **PERMISSIONS**.

- ◆ Remove user: To remove a user from the permission set, select the user by hovering over **PERMISSION SET MEMBERS** under **USERS**, and click **Remove**.
- ◆ Add user: To add user under the permission set, click more under the **PERMISSION SET MEMBERS**. A right-sided pane appears. Add the desired user or users from the list of users and click **SAVE**.

### 3.2.5 Delete user

To delete user

- ◆ Go to Access Control > Admin Console > User
- ◆ Under **USERS**, either hover mouse or click over the desired user. On clicking the user, a **Delete User** icon appears in the toolbar, and on hovering, the **Delete User** icon appears on the right side of the selected user. Click the **Delete User** icon.
- ◆ To delete multiple users, select the users by clicking, and then click the **Delete User** icon in the toolbar.

### 3.2.6 Delete permission set

To delete permission set

- ◆ Go to Access Control > Admin Console > Permission Set
- ◆ Under **PERMISSION SETS**, either hover mouse or click over the desired permission set. On clicking the permission set, a **Delete PermissionSet** icon appears in the toolbar, and on hovering, the **Delete PermissionSet** icon appears on the right side of the selected permission set. Click the **Delete PermissionSet** icon.
- ◆ To delete multiple permission sets, select the permission sets by clicking, and then click the **Delete PermissionSet** icon in the toolbar.

# 4 Use

This section provides a detailed description about how as a user you can Sign In, add UNIX agent in the WAM server, and push patches in the UNIX agent through the WAM server.

## 4.1 Sign In

To Sign In:

1. Launch the WAM URL `https://<IP Address>:<Port>/WAMServer.8.0.X/`
2. If you are an existing user, Sign In page is displayed.
3. Enter the username and password, and then click on **Sign In**.
4. You will be redirected to WAM home page only when the username and password are correct.

## 4.2 Add UNIX agent

Add host enables you to add and manage hosts in the WAM server console. Before doing host addition, ensure the WAM client is deployed and running in the UNIX agent.

To add UNIX agent:

1. Go to Manage Hosts > Host.
2. Click **Add Host** icon. **Add Machine** dialog box appears
  - ♦ For single UNIX agent addition, specify the UNIX agent name or IP address of the agent machine.
  - ♦ For multiple machine addition, specify the UNIX agent names or IP addresses of all the agent machines separated by commas. WAM server stops processing the list if it encounters an error, which you can correct manually by removing the duplicate or invalid entry.
3. Click **ADD**.
4. The progress of the add agent can be viewed in **TASKS** page.
5. On successful addition of agent, the agent details is listed in the **Hosts** page.

## 4.3 Delete UNIX agent

To delete agent:

1. Go to Manage Hosts > Host
2. Select the UNIX agent or agents and click the **Delete Host** icon.

## 4.4 Agent status

To see status of agent addition:

1. Go to Manage Hosts > Tasks
2. Select the checkbox to select the agent.
3. Click **Show Result** icon or double click on the host, a right-sided pane appears, which shows detailed status of agent being added.

## 4.5 Patch management

Patch management allows you to install patch or patches, uninstall a patch, and view patch history.

### 4.5.1 Install patch

To install patch

1. Go to PATCH > INSTALL PATCH
2. Click the **Upload Patch** icon on the left hand side.
3. Select the patch from your machine and upload in the WAM server.
4. Select the patch or patches from the list by clicking.
5. Select the host, in which the patches are to be installed.
6. Click the **INSTALL PATCH** button.
7. On selecting multiple patches, a dialog box appears asking you to reorder the patches, click **OK**.
8. A **CONFIRMATION** dialog box appears. Click **AGREE** to start the patch installation.
9. To see the progress of patch installation, go to MANAGE HOSTS > TASKS. Click **view** corresponding to the hostname. A right-sided pane appears showing the details of patch installation.

### 4.5.2 Uninstall patch

To unistall patch:

1. Go to PATCH > UNINSTALL PATCH
2. Select the patch by clicking.
3. Select the hosts, in which you want to uninstall the patch.
4. Click **UNINSTALL PATCH** button to proceed.
5. A **CONFIRMATION** dialog box appear. Click **AGREE** to start patch uninstallation.
6. To see the progress of patch uninstallation, go to MANAGE HOSTS > TASKS.. Click **view** corresponding to the hostname. A right-sided pane appears showing details of patch uninstallation.
7. In case of failure, you can use the "Forceful" dropdown option from the **UNINSTALL** button to remove the patch forcefully

### 4.5.3 Patch history

Patch history gives you the details of the patches that you have applied, removed, or rejected from a host.

To see patch history:

1. Go to PATCH > PATCH HISTORY
2. Double click on the host, a right pane appears which shows the patch history.





## 5.1.2 Create User

### 5.1.2.1 Description

Creating a user

---

**NOTE:** updateType should be set to "ADD"

---

### 5.1.2.2 Operation

POST

### 5.1.2.3 Path/Endpoint

Users/ProcessUser

<http://localhost:8080/WAMServer/webresources/resources/Users/ProcessUser>

### 5.1.2.4 Headers

#### Authorization

eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzdWIiOiJhZG1pbiIsImF1ZCI6IltEaWFnbm9zdG1jcywgTWFuYXd1TG9ncywgU2NhbiwgRXhwb3J0SW1wb3J0LCBQYXRjaE1hbmFnZXIsIFVwZ3JhZGUsIEFkbWluaXN0cmF0b3IsIEFNLlCBVmluc3RhbGxkaXN0ZXhwIjozNTM4Mjk5MTU1LCJpYXQiOiJlMzgyOTgyNTUsImp0aSI6IjEifQ.6mGZ87vPvvFkgAXF8UQDYF9OnwoexwnbmUPoy8Po7OY

#### Content Type

Application/json

#### Body

```
{
  "firstname": "Anant",
  "lastname": "K",
  "updateType": "ADD",
  "username": "Anant",
  "password": "Control123"
}
```

## 5.2 Role Endpoints

### 5.2.1 Get Roles

#### 5.2.1.1 Description

Get all existing roles/permission sets











## 5.4.2.4 Headers

### Authorization

Bearer  
eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzdWIiOiJhZG1pbiIsImF1ZCI6IltQYXRjaElhbmFnZXIsIFVuaW5zdGFsbCwgTWFuYWdlTG9ncywgQU0sIEV4cG9ydEltcG9ydCwgVXBncmFkZSwgQWRtaW5pc3RyYXRvciwgRGlhZ25vc3RyY3MsIFNjYW5dIiwiaXhwIjozNTM4MzAwMjg1LCJpYXQiOjE1MzgyOTkzODUsImp0aSI6IjEifQ.eXnbKxcKIFmEzGobBxRPhcx9gWhg2RKgrsAO1YL\_7Jc

### Content-Type

application/json

### Body

```
{  
  "firstname": "Anant",  
  "lastname": "K",  
  "password": "",  
  "updateType": "NONE",  
  "userid": 10,  
  "username": "Anant"  
}
```

## 5.4.3 Fetch Users of a Role

### 5.4.3.1 Description

Get all the assigned users for a role

### 5.4.3.2 Operation

POST

### 5.4.3.3 Path/Endpoint

/RoleUsers

<http://localhost:8080/WAMServer/webresources/resources/RoleUsers>

### 5.4.3.4 Header

#### Authorization

Bearer  
eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzdWIiOiJhZG1pbiIsImF1ZCI6IltQYXRjaElhbmFnZXIsIFVuaW5zdGFsbCwgTWFuYWdlTG9ncywgQU0sIEV4cG9ydEltcG9ydCwgVXBncmFkZSwgQWRtaW5pc3RyYXRvciwgRGlhZ25vc3RyY3MsIFNjYW5dIiwiaXhwIjozNTM4MzAwMjg1LCJpYXQiOjE1MzgyOTkzODUsImp0aSI6IjEifQ.eXnbKxcKIFmEzGobBxRPhcx9gWhg2RKgrsAO1YL\_7Jc





## Content-Type

application/json

## Body

```
{
  "permission":{
    "value": "AM"
  },
  "roleInfo":{
    "desc": "Role for patch permission",
    "name": "Patch Role",
    "roleid": 12,
    "updateType": "NONE"
  }
}
```

## 5.5.2 Get Role Permissions

### 5.5.2.1 Description

Get permissions assigned to a given role

### 5.5.2.2 Operation

POST

### 5.5.2.3 Path/Endpoint

/resources/RolePermissions

http://localhost:8080/WAMServer/webresources/resources/RolePermissions

### 5.5.2.4 Headers

#### Authorization

Bearer

eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzdWIiOiJhZG1pbiIsImF1ZCI6IltQYXRjaElhbmFnZXIsIFVuaW5zdGFsbCwgTWFuYWdlTG9ncywgQU0sIEV4cG9ydEltcG9ydCwgVXBncmFkZSwgQWRtaW5pc3RyYXRvciwGRGlhZ25vc3RpdjY3MsIFNjYXZlIiwiaWF0IjoxNTM4MzAxMjc1LCJpYXQiOiJlMzgzMDAzNzUsImp0aSI6IjEifQ.n0xs7rnq3VxKJLYehRUbymSVUgPuJncNsUkbPiJqPkc

#### Content-Type

application/json



## Body

```
{
  "desc": "Role for patch permission",
  "name": "Patch Role",
  "roleid": 12,
  "updateType": "NONE"
}
```

## 5.5.3 Remove Permission From a Role

### 5.5.3.1 Description

Both permission and role should be sent in the required format

### 5.5.3.2 Operation

POST

### 5.5.3.3 Path/Endpoint

/RolePermissions/Remove

<http://localhost:8080/WAMServer/webresources/resources/RolePermissions/Remove>

### 5.5.3.4 Headers

#### Authorization

Bearer  
eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzZWUiOiJhZG1pb2IiImF1ZCI6IltQYXRjaElhbmFnZXIiIFVuaW5zdGFsbCwgTWFuYWdlTG9ncywgQU0sIEV4cG9ydEltcG9ydCwgVXBncmFkZSwgQWRtaW5pc3RyYXRvciwGRGlhZ25vc3RyY3MsIFNjYXZ5dIiwiaXNjaXhwIjozNTM4MzAxMjc1LCJpYXQiOjE1MzgzMDAzNzUsImp0aSI6IjEifQ.n0xs7rnq3VxKJLYehRUbymSVUgPuJncNsUkbPiJqPkc

#### Content-Type

application/json

#### Body

```
{
  "permission":{
    "value": "AM"
  },
  "roleInfo":{
    "desc": "Role for patch permission",
    "name": "Patch Role",
    "roleid": 12,
    "updateType": "NONE"
  }
}
```







## 5.6.5.2 Operation

DEL

## 5.6.5.3 Path/Endpoints

/Host/10.204.123.34

http://localhost:8084/WAMServer/webresources/resources/Host/10.204.123.34

## 5.6.5.4 Headers

### Authorization

Bearer

eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzZWUiOiJhZG1pbiIsImF1ZCI6IltNYW5hZ2VMb2dzLCBEaWFnbm9zdG1jcywgQU0sIEV4cG9ydEltcG9ydCwgQWRtaW5pc3RyYXRvciiWVXBncmFkZSwgU2NhbiwgVW5pbmN0YWxsLCBQYXRjaElhbmFnZXJdIiwiaXNwIjozNTQwODI2NTc1LCJpYXQiOjE1NDA4MDQ5NzUsImp0aSI6IjEifQ.0VkJGyAkVKguIzuLY1QNHDstZVN-rPmlr\_klwGt-7g44

### Content-Type

application/json

## 5.7 Patch

### 5.7.1 Getting list of patches

#### 5.7.1.1 Description

For getting list of patches from server

#### 5.7.1.2 Operation

GET

#### 5.7.1.3 Path/Endpoint

/Patches

http://localhost:8084/WAMServer/webresources/resources/Patches

#### 5.7.1.4 Headers

##### Authorization

Bearer

eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzZWUiOiJhZG1pbiIsImF1ZCI6IltTY2FuLDBBTSwgRGlhZ25vc3RyY3MsIFBhdGNoTWFuYWdlciwgVXBncmFkZSwgRXhwb3J0SW1wb3J0LCBVbmluc3RhbGwsIElhbGFnZUxvZ3MsIEFkbWluaXN0cmF0b3JdIiwiaXNwIjozNTQwODc3MTgwLCJpYXQiOjE1NDA4NzYyODAsImp0aSI6IjEifQ.BHSlmFaB7sRUyRzfiAXwTJL-xfF2VgLubkca-YDiM7k

## 5.7.2 Installing patch

### 5.7.2.1 Description

Installing multiple patches on multiple hosts

### 5.7.2.2 Operation

POST

### 5.7.2.3 Path/Endpoint

/Patches/Apply

<http://localhost:8084/WAMServer/webresources/resources/Patches/Apply>

### 5.7.2.4 Headers

#### Authorization

Bearer

```
eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzdWIiOiJhZG1pbmIsImF1ZCI6IltVcGdyYWR1LCBBTSwgTWFuYWdlTG9ncywgVW5pbnN0YWxsLCBBZG1pbm1zdHJhdG9yLCBTY2FuLCBQYXRjaE1hbmFnZXIiOiJERpYWdub3N0aWNzLCBFeHBvcnRjbXBvcnRdIiwiaXNwIjoxNTQwODk1NDgyLCJpYXQiOiJlNDNA40TQ1ODIsImp0aSI6IjEifQ.alDbKPA2g_nEl4fNSap3XHJNL_v66AXqwwTOElJm9uI
```

#### Content-Type

application/json

#### Body

```
{
  "patchesInfo" : [{
    "bundleFiles" : [],
    "components" : "AM",
    "details" : {
      "Name" : "p82p1",
      "Version" : "8.2.0.1",
      "Date" : "Thu Feb 22 22:17:43 MST 2018",
      "Required Components" : "AM",
      "Description" : "\nAgent patch for Unix agent 8.2 for WebLogicSvr 8.0.0.1\nrelease\n\nAM/lib/site_perl/5.10.0/aix-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/aix-thread-multi/NetIQ/BaseMO3_0.pm\nAM/mo/config/WebLogicSvrMsg.msg\nAM/lib/site_perl/5.10.0/PA-RISC1.1-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/PA-RISC1.1-thread-multi/NetIQ/BaseMO3_0.pm\nAM/lib/site_perl/5.10.0/IA64.ARCHREV_0-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/IA64.ARCHREV_0-thread-multi/NetIQ/BaseMO3_0.pm\nAM/lib/site_perl/5.10.0/i686-linux-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/i686-linux-thread-multi/NetIQ/BaseMO3_0.pm\nAM/mo/weblogicsvr/java/lib/WebLogicSvr12x.jar\nAM/lib/site_perl/5.10.0/x86_64-linux-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/x86_64-linux-thread-multi/NetIQ/BaseMO3_0.pm\nAM/lib/site_perl/5.10.0/ia64-linux-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/ia64-linux-thread-multi/NetIQ/BaseMO3_0.pm\nAM/lib/site_perl/5.10.0/sun4-solaris-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/sun4-solaris-thread-multi/NetIQ/BaseMO3_0.pm\nAM/lib/site_perl/5.10.0/i86pc-solaris-thread-multi/NetIQ/WebLogicSvr.pm\nAM/lib/site_perl/5.10.0/i86pc-solaris-thread-multi/NetIQ/"}
  ]
}
```

```

BaseM03_0.pm\n",
  "file": "p82pl.tar",
  "fileLoc": "C:\\Users\\msantosh\\.WAM\\DERBYDB\\patches\\agent\\p82pl.zip",
  "index": -1,
  "name": "p82pl",
  "path": "C:\\Users\\msantosh\\.WAM\\DERBYDB\\patches\\agent\\p82pl.zip",
  "version": "8.2.0.1"
}],

"hosts" : [
{
  "aminstalled": "true",
  "amstatus": "Running",
  "amversion": "8.0.0.0",
  "hostname": "IDCDVAM878",
  "id": 12,
  "osarch": "amd64",
  "ostype": "Linux",
  "patchDetails": "8.2.0.1\n8.1.0.14\n8.1.0.12\n###\n\nAPPLY (8.1.0.14) on
Thu Oct 25 04:04:21 PDT 2018\n\nAPPLY (8.2.0.1) on Thu Oct 25 04:04:27 PDT
2018\n\nREJECT DUPLICATE (8.2.0.1) on Thu Oct 25 04:06:14 PDT 2018\n\nREMOVE (8.2.0.1)
on Thu Oct 25 04:08:41 PDT 2018\n\nAPPLY (8.2.0.1) on Thu Oct 25 04:26:45 PDT
2018\n\nREJECT DUPLICATE (8.2.0.1) on Thu Oct 25 04:28:14 PDT 2018\n\nAPPLY
(8.1.0.12) on Thu Oct 25 04:49:46 PDT 2018\n\nREMOVE (8.1.0.12) on Thu Oct 25
04:59:41 PDT 2018\n\nREMOVE (8.2.0.1) on Thu Oct 25 04:59:47 PDT 2018\n\nREMOVE
(8.1.0.14) on Thu Oct 25 04:59:52 PDT 2018\n\nAPPLY (8.1.0.12) on Thu Oct 25
05:04:51 PDT 2018\n\nAPPLY (8.1.0.14) on Thu Oct 25 05:04:57 PDT 2018\n\nREJECT
DUPLICATE (8.1.0.12) on Thu Oct 25 22:32:20 PDT 2018\n\nREJECT DUPLICATE (8.1.0.14)
on Thu Oct 25 22:32:20 PDT 2018\n\nREJECT DUPLICATE (8.1.0.14) on Mon Oct 29 22:05:49
PDT 2018\n\nAPPLY (8.2.0.1) on Mon Oct 29 22:05:50 PDT 2018\n",
  "updateType": "NONE",
  "wamclientstatus": "true",
  "wamclientversion": "1.0.0"
}
]
}

```

## 5.7.3 Uninstalling patch

### 5.7.3.1 Description

Uninstalling a patch from a host or hosts.

### 5.7.3.2 Operation

POST

### 5.7.3.3 Path/Endpoints

/Patches/Remove

<http://localhost:8084/WAMServer/webresources/resources/Patches/Remove>





### 5.7.4.3 Path/Endpoint

/Patches/ForcefulRemove

http://localhost:8084/WAMServer/webresources/resources/Patches/ForcefulRemove

### 5.7.4.4 Headers

#### Authorization

Bearer

```
eyJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJXQU1TZXJ2ZXIiLCJzZWUiOiJhZG1pbiIsImFlZCI6IltQYXRjaElhbmFnZXIsIFVuaW5zdGFsbCwgTWFuYWdlTG9ncywgVXBncmFkZSwgQU0sIERpYWdub3N0aWNzLCBBZG1pbmlzdHJhdG9yLCBFeHBvcnRJbXBvcnQsIFNjYW5dIiwizXhwIjoxNTQwOTc2NDcxLCJpYXQiOjE1NDA5NzU1NzEsImp0aSI6IjEifQ.hTsxSxYldhm4pHry8n4ybcU34CxJ9oktQ4cSQwZHrRc
```

#### Content-Type

application/json

#### Body

```
{
  "patchesInfo" : "8.2.0.1",
  "hosts" :
  {
    "aminstalled": "true",
    "amstatus": "Running",
    "amversion": "8.0.0.0",
    "hostname": "idcdvam985.amdom009.lab",
    "id": 12,
    "osarch": "amd64",
    "ostype": "Linux",
    "patchDetails": "8.2.0.1\n8.1.0.14\n8.1.0.12\n###\n\nAPPLY (8.1.0.14) on
Thu Oct 25 04:04:21 PDT 2018\n\nAPPLY (8.2.0.1) on Thu Oct 25 04:04:27 PDT
2018\n\nREJECT DUPLICATE (8.2.0.1) on Thu Oct 25 04:06:14 PDT 2018\n\nREMOVE (8.2.0.1)
on Thu Oct 25 04:08:41 PDT 2018\n\nAPPLY (8.2.0.1) on Thu Oct 25 04:26:45 PDT
2018\n\nREJECT DUPLICATE (8.2.0.1) on Thu Oct 25 04:28:14 PDT 2018\n\nAPPLY
(8.1.0.12) on Thu Oct 25 04:49:46 PDT 2018\n\nREMOVE (8.1.0.12) on Thu Oct 25
04:59:41 PDT 2018\n\nREMOVE (8.2.0.1) on Thu Oct 25 04:59:47 PDT 2018\n\nREMOVE
(8.1.0.14) on Thu Oct 25 04:59:52 PDT 2018\n\nAPPLY (8.1.0.12) on Thu Oct 25
05:04:51 PDT 2018\n\nAPPLY (8.1.0.14) on Thu Oct 25 05:04:57 PDT 2018\n\nREJECT
DUPLICATE (8.1.0.12) on Thu Oct 25 22:32:20 PDT 2018\n\nREJECT DUPLICATE (8.1.0.14)
on Thu Oct 25 22:32:20 PDT 2018\n\nREJECT DUPLICATE (8.1.0.14) on Mon Oct 29 22:05:49
PDT 2018\n\nAPPLY (8.2.0.1) on Mon Oct 29 22:05:50 PDT 2018\n",
    "updateType": "NONE",
    "wamclientstatus": "true",
    "wamclientversion": "1.0.0"
  }
}
```

