Adeptia AS2 Setup Guide using JSCAPE

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DOCUMENT INFORMATION

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Adeptia Support Information

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PREFACE

This document gives you detailed information about the integration of JSCAPE MFT Server AS2 application with Adeptia Suite.

Pre-requisites

- You should have Adeptia Suite Installed on the server/servers (in case of cluster).
- JSCAPE (version 9.0.2.112) will be installed on the Adeptia Servers as windows service with Log On as properties configured for Admin users.
- You should have the JSCAPE Server (9.0.2.112 version) installer, activation keys and certificates available.
- Make sure you have certificates from trading partners for AS2 server you want to connect.
- You should have database access credentials of Adeptia Log database to add new tables(if required)
- You should have "AdeptiaSuite_6_2_12June_2014" applied that includes the support of JSCAPE integrated B2B logs.

Target Audience

This document is intended for all users of Adeptia Suite, who wants to exchange EDI data through AS2 protocol using JSCAPE MFT Server tool and integrate it with Adeptia Suite.

Other resource materials

The following other resource materials are available:

Title	Description
Developer Guide	This document covers a detailed description of all activities and services of Adeptia Suite that are available to a developer. It acts as a guideline to use these services seamlessly and use them in a design environment using Adeptia Suite.

HOW IS THIS GUIDE ORGANIZED?

This guide is organized into the following sections:

Section	Description
Preface	Introduction to this document
Introduction	Introduction to the JSCAPE Server
Install JSCAPE Server	Provides steps to install JSCAPE Server

Section	Description
Configure JSCAPE Server to Communicate through AS2	Detailed step-wise description for setting up JSCAPE server and to be able to communicate through AS2 protocol

CONVENTIONS

The following tables list the various conventions used in Adeptia documentation. We follow these conventions to help you quickly and easily identify particular elements, processes, and names that occur frequently in documents.

Typographical conventions

This guide uses the following typographical conventions:

Convention	Description
Italic Text	Indicates a reference or title of a publication.
`Monospaced Text`	Indicates code examples, syntax, or system messages.
`Monospaced Bold Text`	Indicates system commands that you enter.

Graphical conventions

This guide uses the following graphical conventions:

Convention	Description
	Indicates additional information that may be of interest to the reader
	Indicates cautions that, if ignored, can result in damage to software or hardware

CONTACTS/REPORTING PROBLEMS

These sections present contact information for a variety of situations.

Sales

In case of any sales queries, please contact us at *sales@adeptia.com*.

Support

For support queries, please contact us at *support@adeptia.com*.

Latest updates and information

For the latest updates and information, please visit us at *www.adeptia.com*.

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Introduction

This document aims at providing detailed steps to install and configure JSCAPE MFT server and integrate it with Adeptia. JSCAPE MFT server supports the data exchange through AS2 protocol and facilitates the communication between different Trading Partners who want to exchange EDI files in a highly secured and efficient manner. AS2 protocol is operated over http(s) protocol and is a highly secure means of communication as it can encrypt and sign the files before sending. Adeptia has provided this functionality of AS2 communication with the help of third party vendor i.e. JSCAPE MFT Server. JSCAPE MFT Server would receive files from different trading partners and would place them on the local servers from where Adeptia would pick those files for further processing.

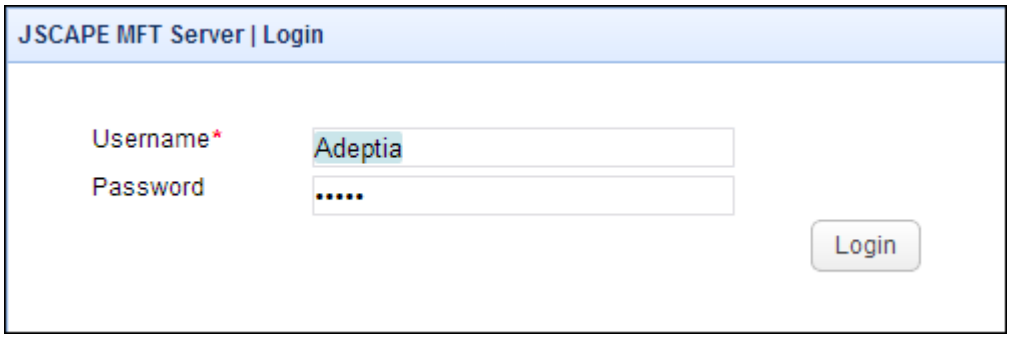
Steps to Install JSCAPE MFT Server

To install JSCAPE MFT Server on a Windows platform perform the following:

1. Download JSCAPE on Server where Adeptia is installed (in case of cluster select primary server)
2. Run the install.exe installation file for JSCAPE MFT Server.

> *You can download JSCAPE from http://www.jscape.com.*
>
> *The direct link to download JSCAPE is http://www.jscape.com/downloads/jscape-mft-server*
>
> *The product downloaded from website is Evaluation version with limited features. You may need to purchase JSCAPE license.*

3. Follow the steps in the installation wizard and complete the installation process.
4. If you are running any firewall software make sure that it is setup to allow JSCAPE MFT Server to run.
5. Start the JSCAPE MFT Server Service.
6. Launch JSCAPE MFT Server Manager to configure your server and login into the web GUI. See figure below.



Configure JSCAPE MFT Server to communicate with other AS2 servers

AS2 communication between two servers requires certificates to be exchanged between servers if they are transferring encrypted and signed messages over AS2. This section will help you in enabling AS2 on JSCAPE MFT server.

CREATING DOMAIN IN JSCAPE SERVER

1. Login into the JSCAPE MFT server Web Interface and it will ask you to create a domain.
2. You can also open the Server Manager manually and Go to Server > New Domain option. .(See Figure1)

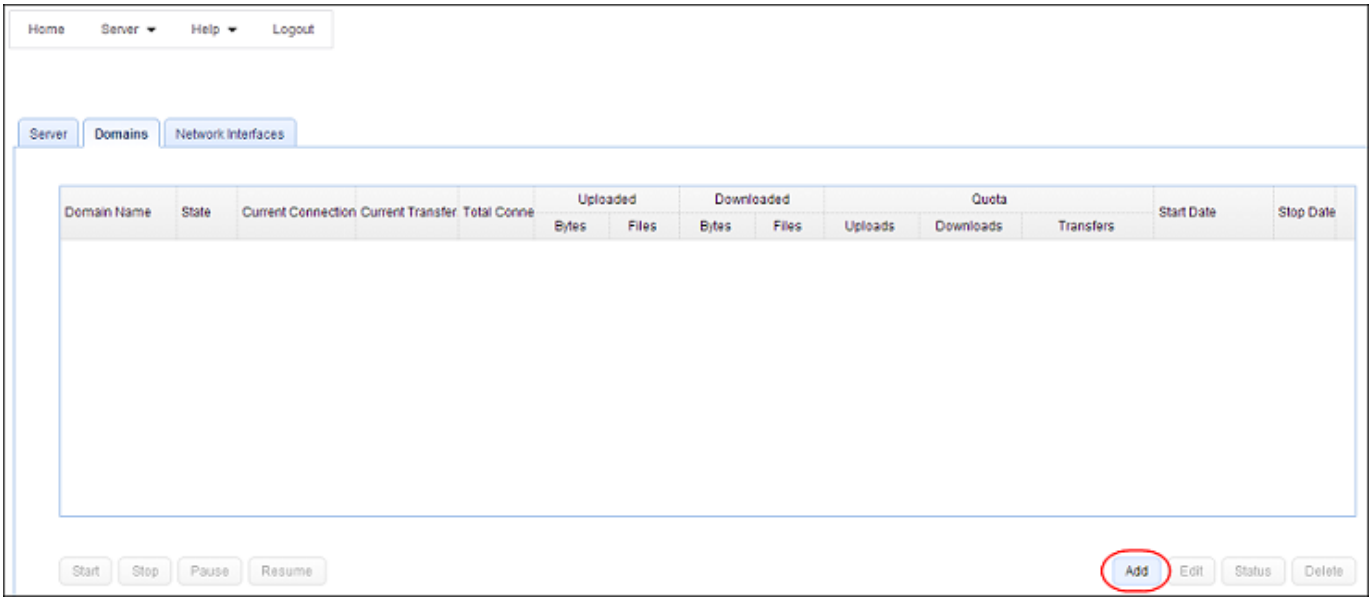


Figure1: Domain Creation Screen

3. The "New domain wizard" is displayed. Follow the wizard to quickly create a new domain for AS2 protocol.(See Figure2)

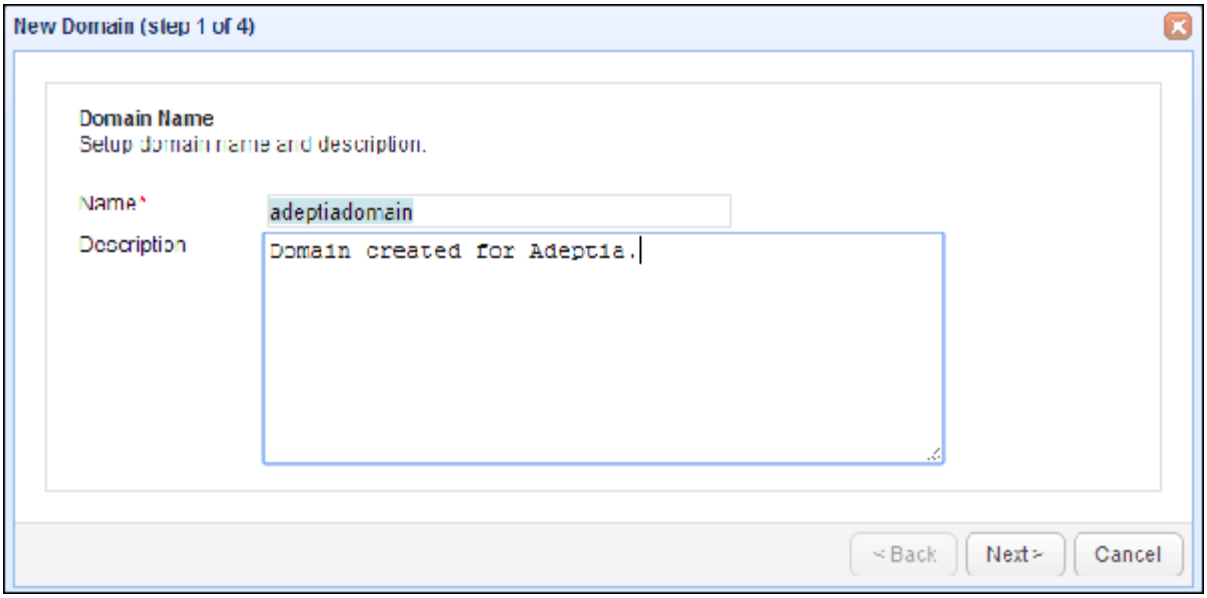


Figure2: New Domain Creation Step 1

Name should be a unique name and should not have spaces for domain name. Make sure to choose the name carefully as it may not be changed once created.

4. After filling the requested information move to step2 of “New domain wizard” and select the AS2 service from the drop-down. (See Figure3)

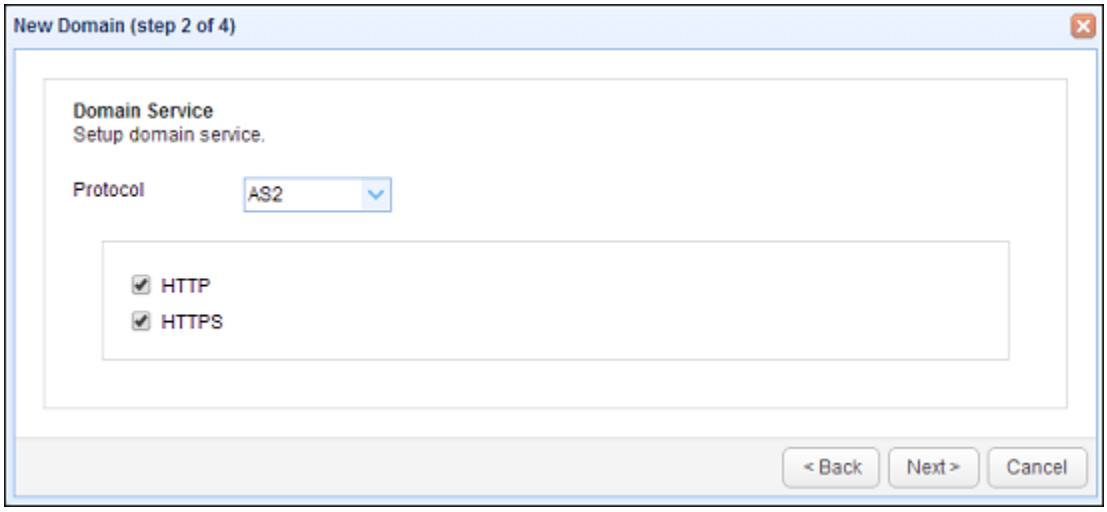


Figure3: New Domain Creation Step 2

5. In step3 select the value for "Store data to" as per your requirement to store the data related to user domain and account. (See Figure4)

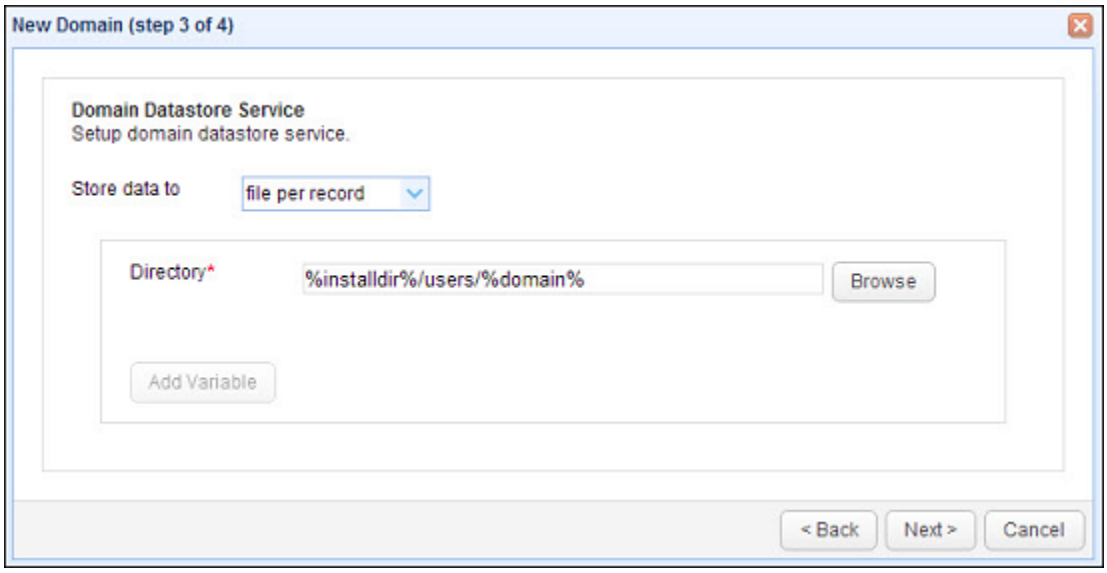


Figure4: New Domain creation step 3

File per record: Select this option to have separate files created to maintain the information for every domain.

File: Select this option to have one single file will maintain the information for all domains.

Database: Select this option to store information in database. The database scripts are available in ../JSCAPE MFT Server/etc in your installation directory.

6. In step 4 select the value for "Log to" as per your requirement to store the logs related to JSCAPE server from the drop down.(See Figure5)

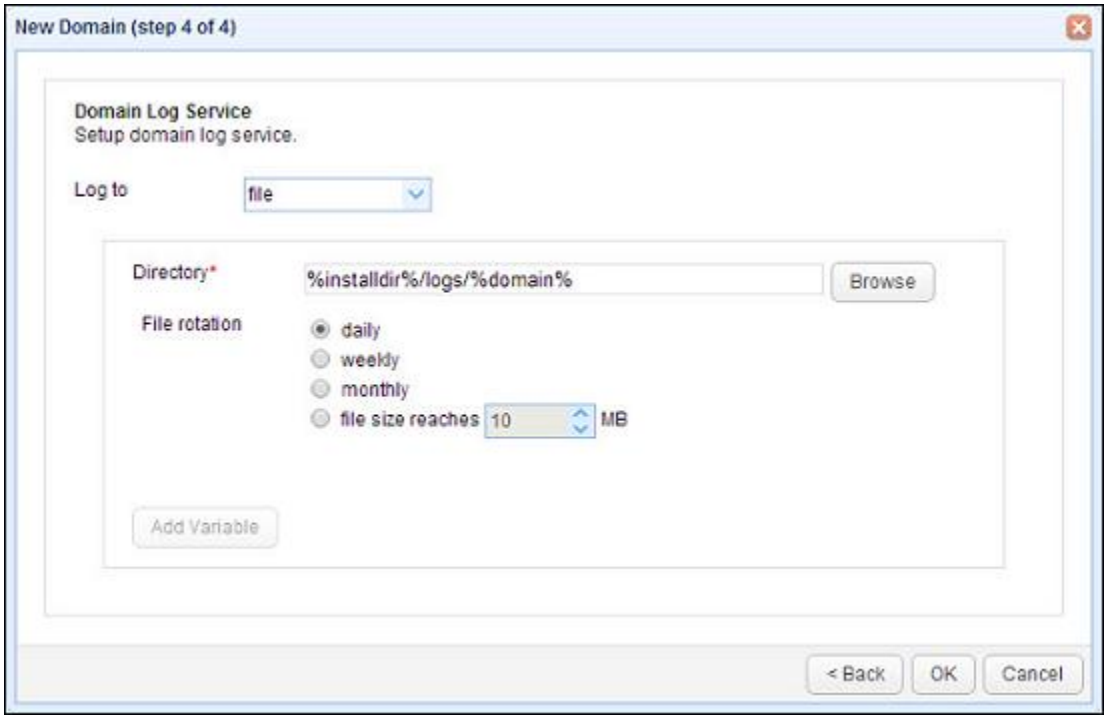


Figure5: New Domain Creation step 4

7. Now using JSCAPE MFT Server Manager you can select the domain and click the "Start" button located in the lower left of JSCAPE window to start the services.(See Figure6)

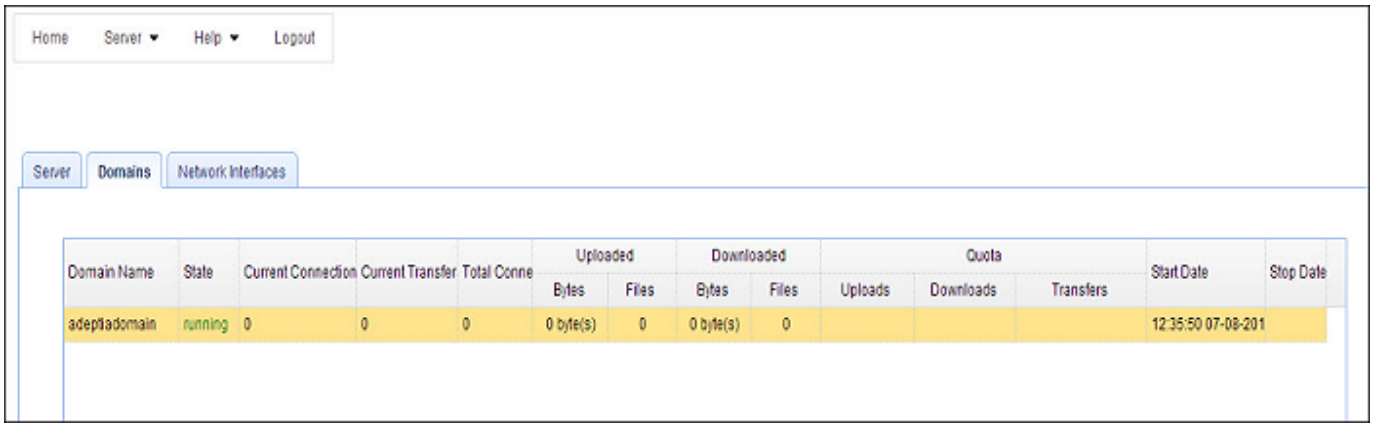


Figure6: Start Domain Screen

ENABLE AS2 SERVICES FOR JSCAPE SERVER

1. Login into the JSCAPE MFT server Web Interface.
2. Go to Server > Settings option. A new screen will open.(See Figure7)

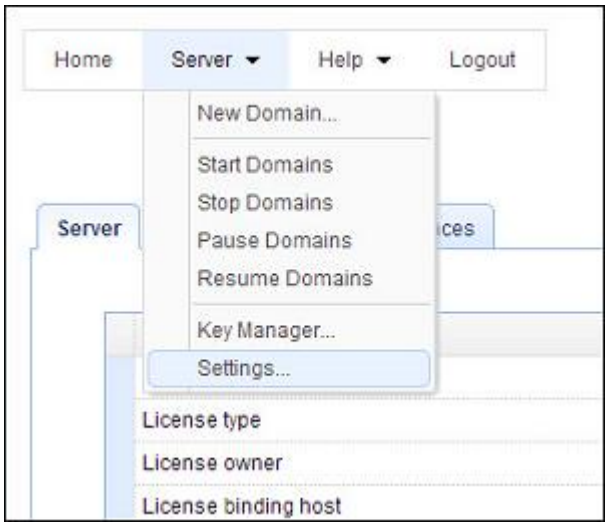


Figure7: Server > Settings Screen

3. Select the Web option from the settings screen and select the “Web” tab.(See Figure8)

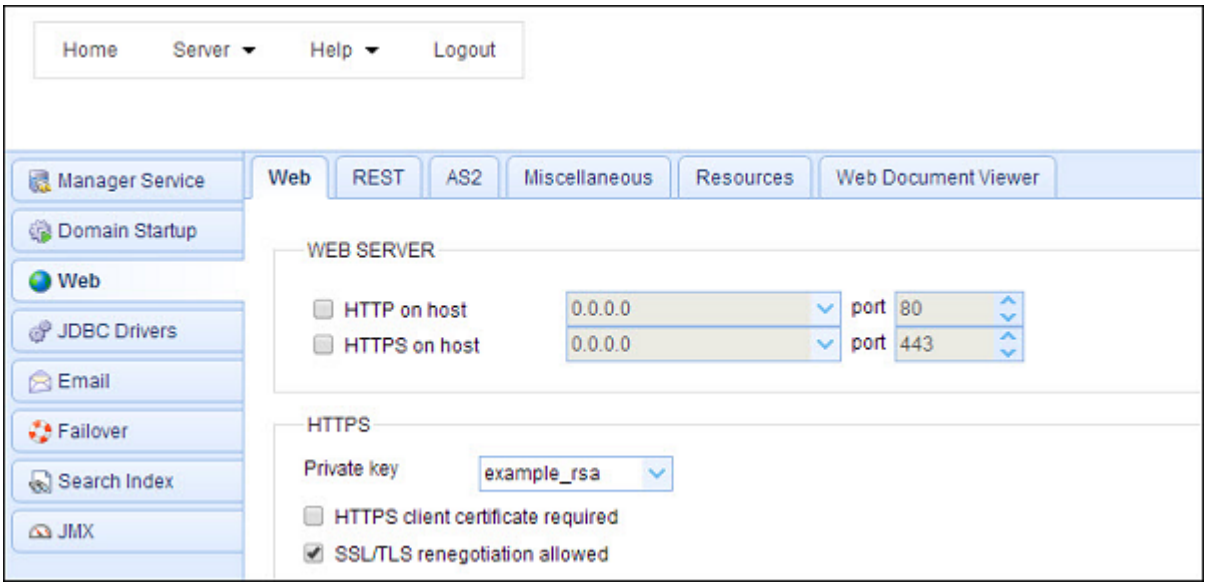


Figure8: Server Settings Web Screen

4. Check the check-boxes for the “HTTP on host” and “HTTPS on host” under Web Server section and configure the IP/hostname and port for them.(See Figure9)

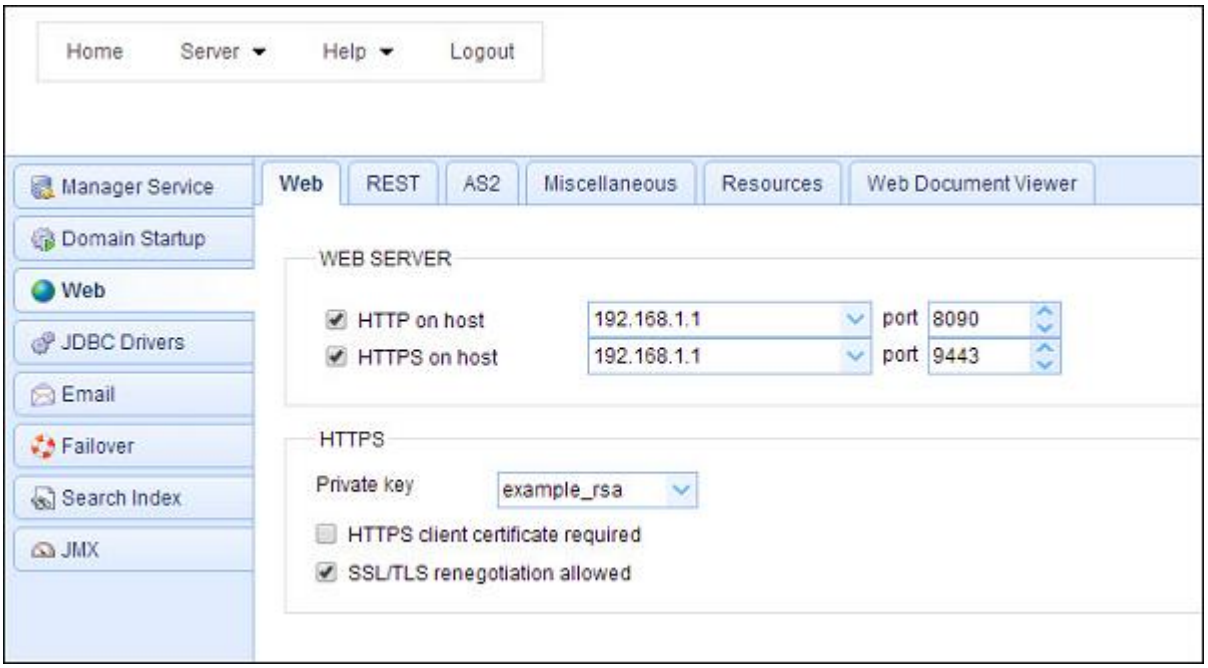


Figure9: Server Settings Web Server Enabled

Please ensure that the port provided above should match with the Adeptia Server port if running on same the machine

5. Select AS2 tab on the same screen and check the "Enable AS2" check-box. Provide the Upload directory for the AS2 messages. This directory is relative to users root directory where AS2 message data will be stored under installation directory.(See Figure10)

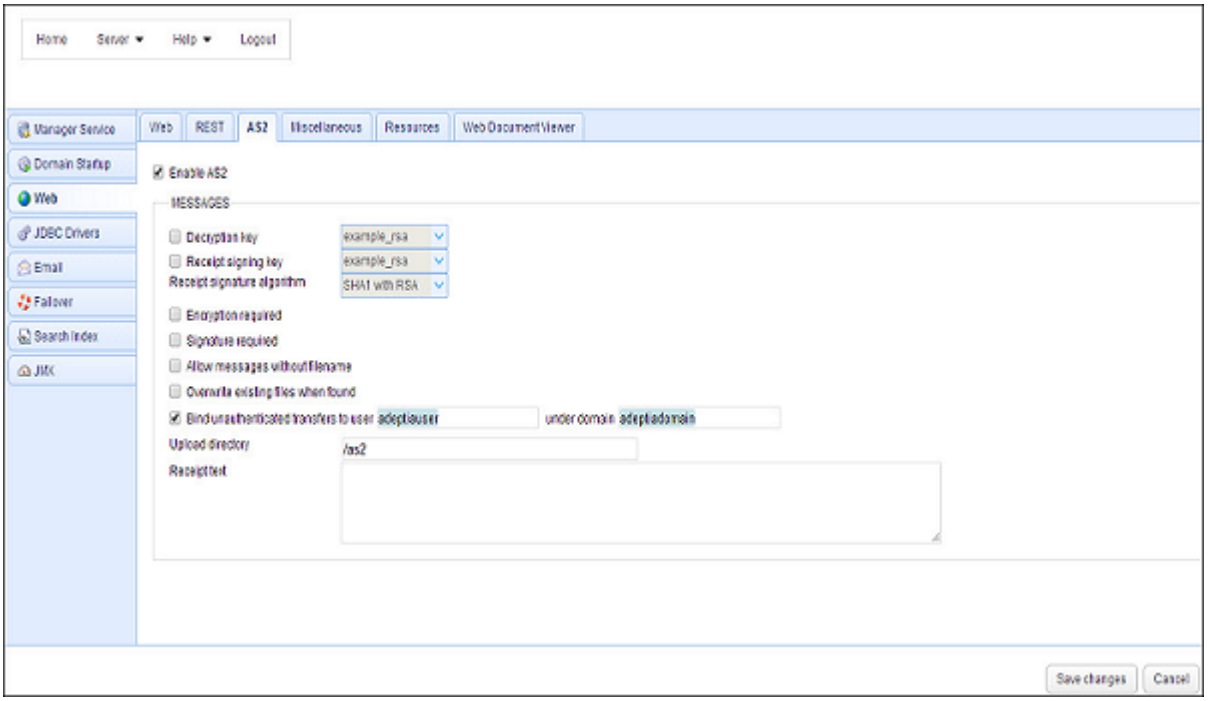


Figure10: Server Settings AS2 Enabled

6. Provide the other details as per your requirement.

7. Click OK button at the bottom to save and apply the changes.

> Enable the "Bind unauthenticated transfers to user ____ under domain _____" property and provide the any user and domain name in this to be able to receive files from other AS2 applications that do not provide username and password authentication for AS2 file transfer.

CREATING A USER PROFILE FOR THE DOMAIN

A user is a valid account that may be used to login to a domain's service. To create users follow below steps:

1. Login into the JSCAPE MFT server Web Interface.
2. Go to "Domains" tab and select the domain created.
3. After selecting the domain click on the "Edit" button at the bottom. This will open a new window.
4. Select the "Users" option from the left pane.
5. Click on "Add" button at the bottom to add a new user for the domain.(See Figure11)

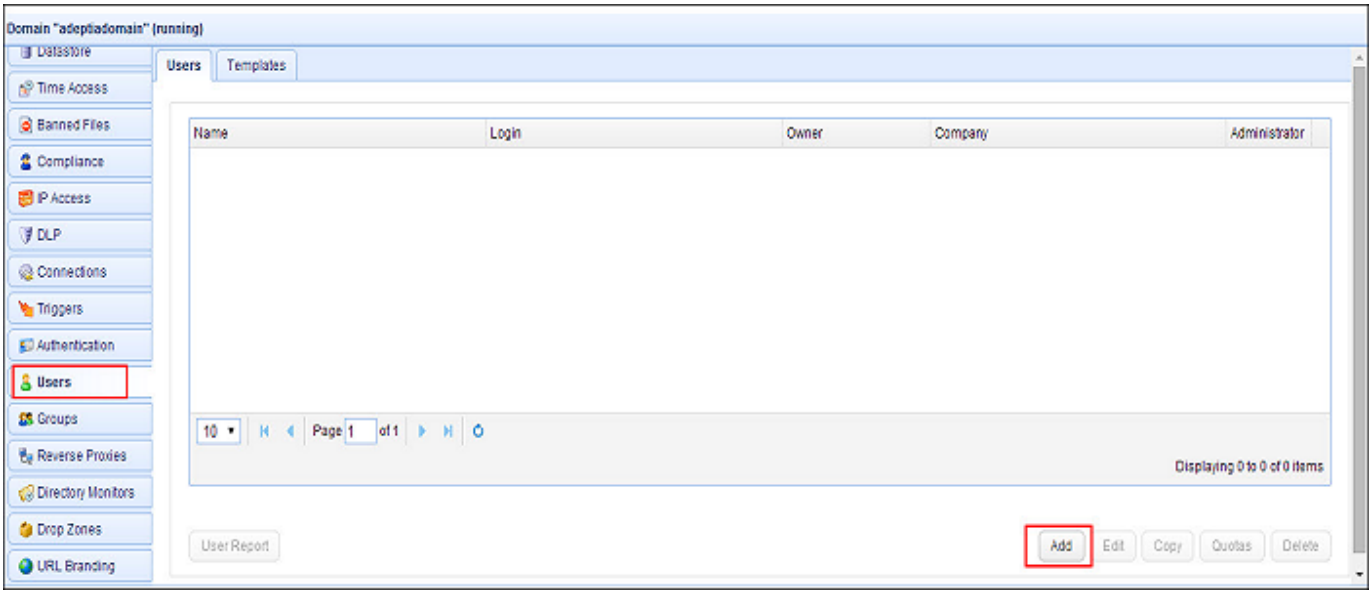


Figure11: User Module Screen

6. It will ask for the template to create the user. Select the default template.(See Figure12)

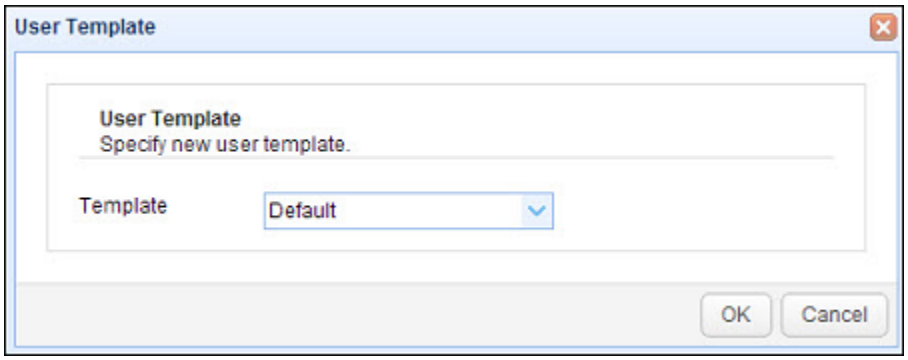


Figure12: Default Template for User Creation

7. In the Info section of the “Add User” screen provide the details like – name, login name, password etc. for the user profile.(See Figure13)

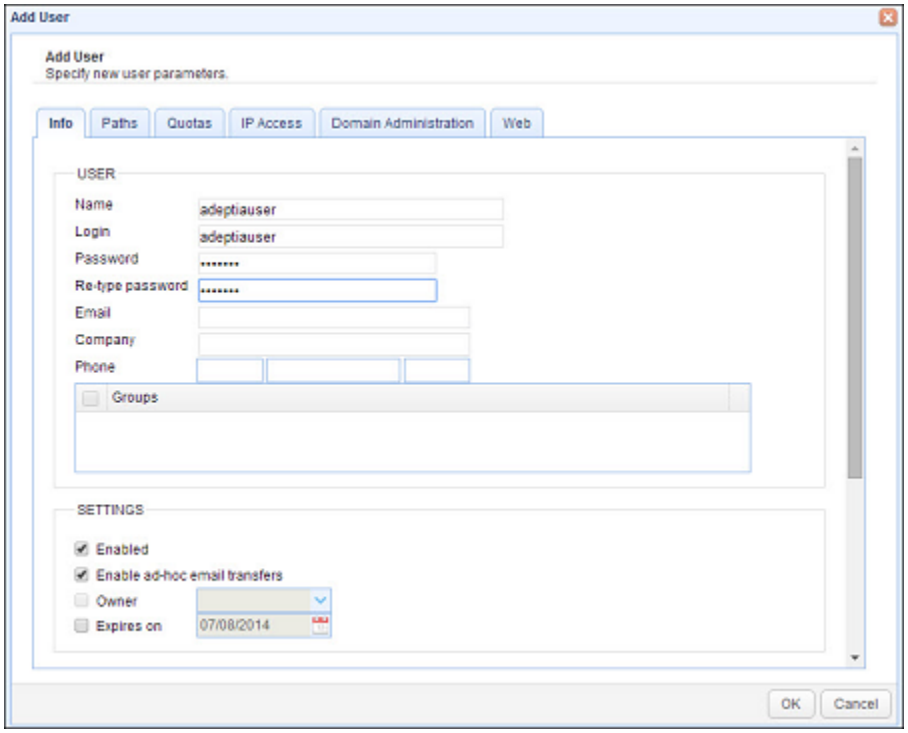


Figure13: User Credentials for User Creation

8. Now go to the Paths tab and click on Add button if not already present or you can edit the existing one. (See Figure14)

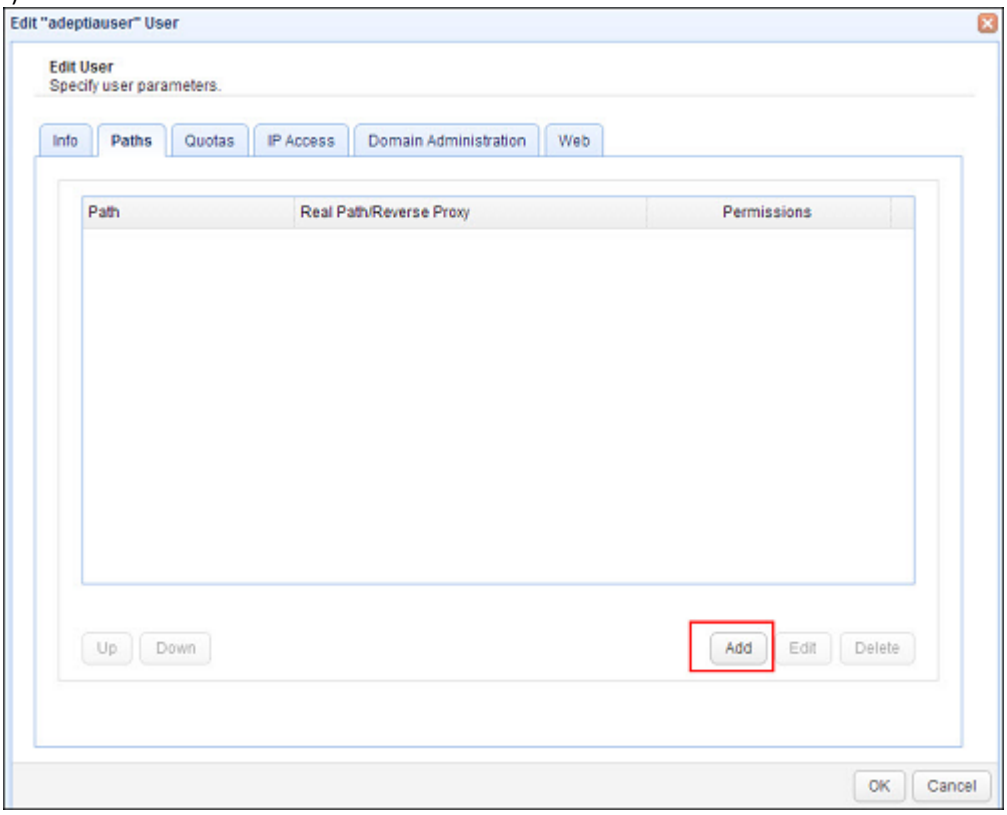


Figure14: Path Settings for User

9. Provide the UNC path in the 'Real Path' field. UNC path is the network path to the shared drive where you want to store the files received through the AS2 file transfer and click on OK. Like - \\ServerNameorIP\SharedFolderName. This will result in the creation on upload directory or JSCAPE at the specified network location. (See Figure15)

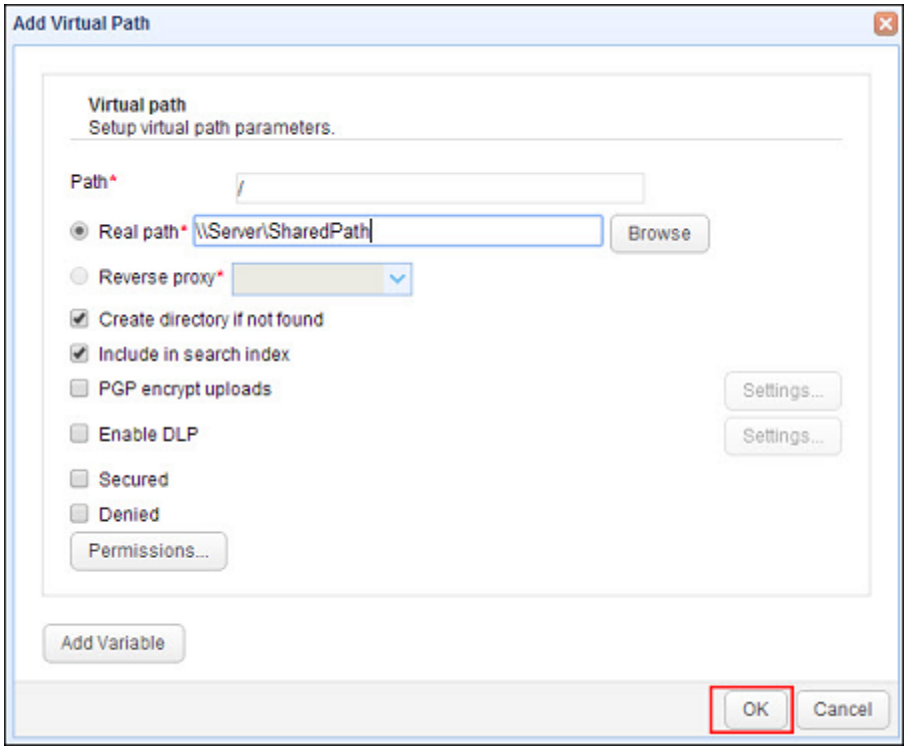


Figure15: Add Virtual Path Screen

To have the UNC path be recognized by the JSCAPE server you need to have certain settings done for the windows service of the JSCAPE. For more detail you can refer to *Configuring JSCAPE service*

10. Click on the OK button at the bottom to save and apply the changes.(See Figure16)

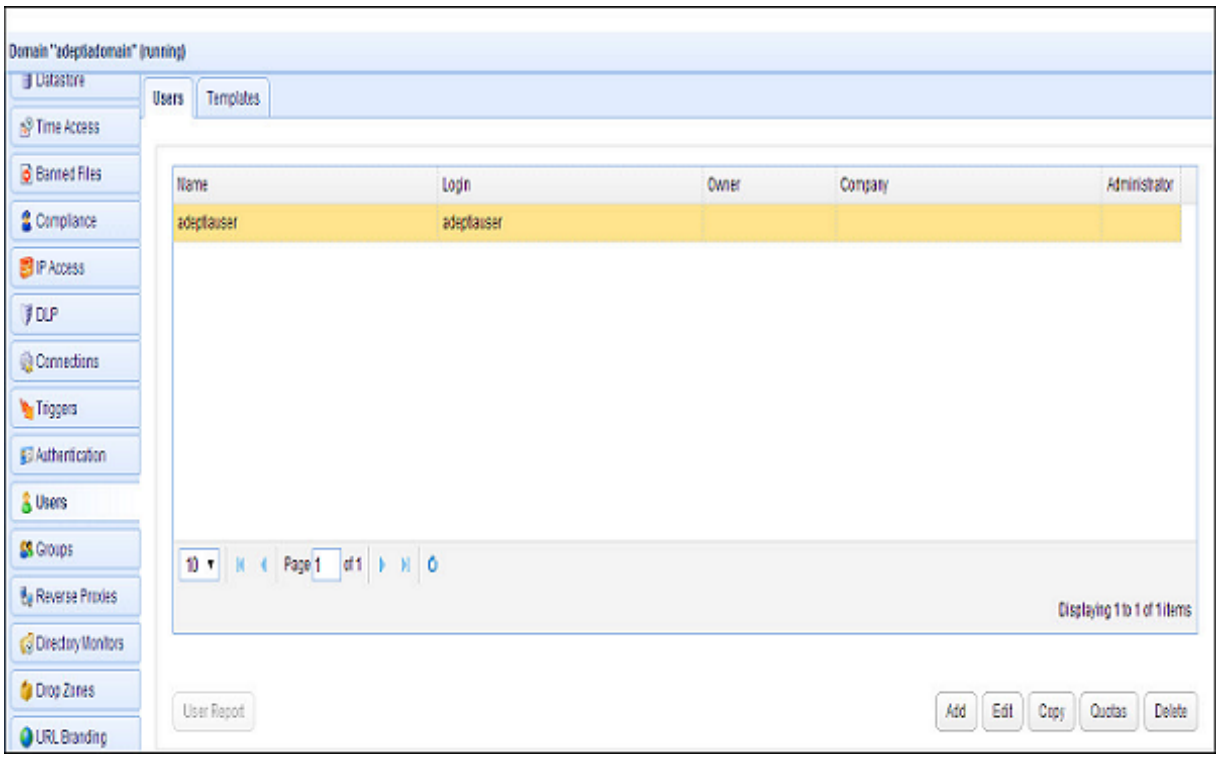


Figure16: User Created for Domain

Setup JSCAPE Failover server

JSCAPE MFT Server can be configured to synchronize all configuration changes to a failover server. The purpose of a failover server is that in the event the production server goes down the failover server can quickly take over the duties of the production server.

PRE-REQUISITE

- You can install JSCAPE Failover Server on the secondary cluster node of Adeptia suite.

> *We always recommend installing JSCAPE on Independent Server to have better performance.*
> *If you are not using Adeptia Cluster try setting up JSCAPE failover server on independent server on the same network.*

- The failover JSCAPE MFT Server should have same version as that of your primary server.
- To configure the JSCAPE Server for failover follow the same installation steps followed to install and configure your primary server.
- The JSCAPE installed on the failover server is running.

STEPS TO DEFINE FAILOVER SERVER

Failover server will be defined on your JSCAPE Primary server. Please follow below steps:

1. Login into the JSCAPE MFT server Web Interface.
2. Go to Server > Settings option. A New screen will show-up.(See Figure17)

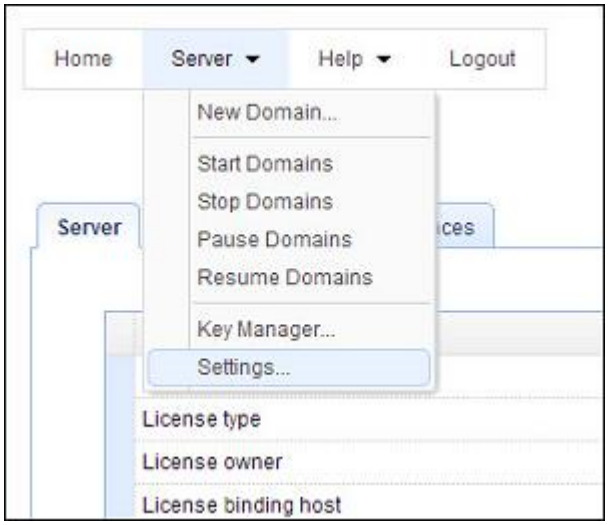


Figure17: Server > Settings Option

3. In the New Screen go to "Failover" module.(See Figure18)

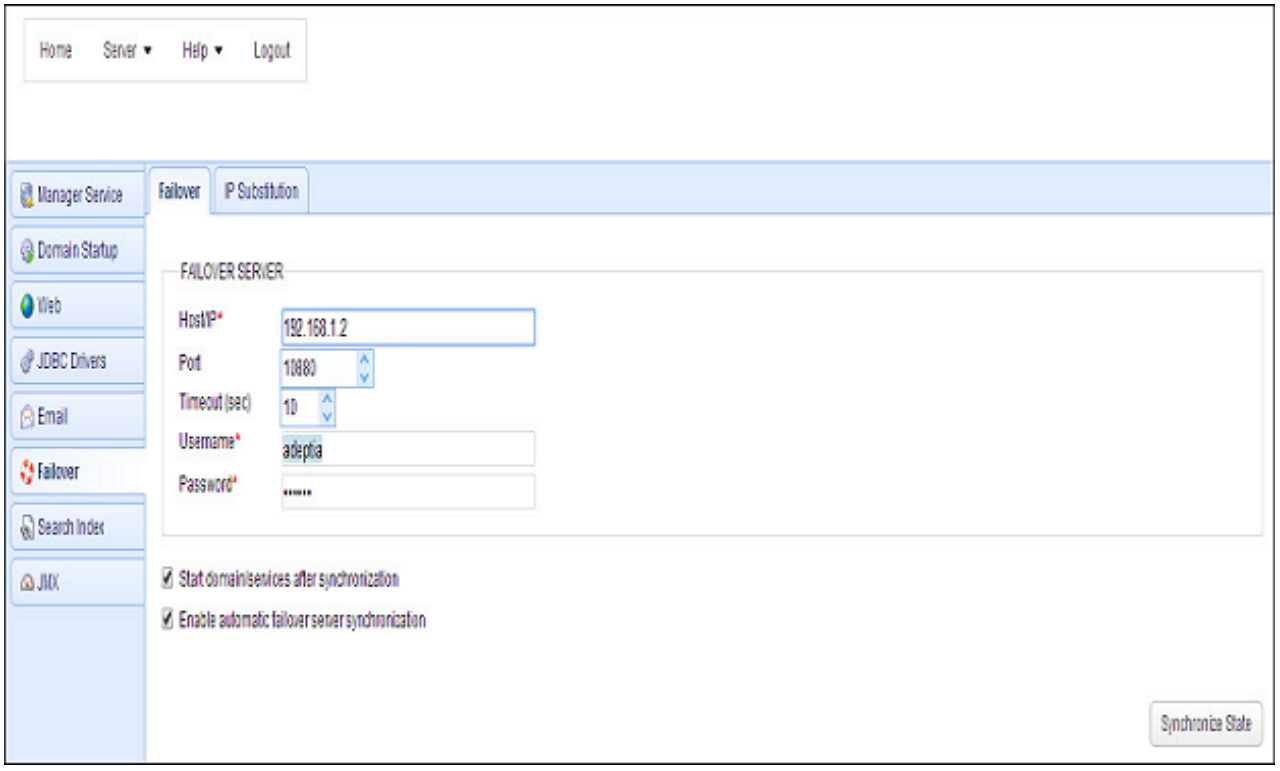


Figure18: Failover Module Settings

4. Provide the IP/Hostname, Port, username and other credentials of the secondary server to be used as Failover.
5. Click on the "Synchronize State" button at bottom of window if you are synchronizing the configurations of Primary and Secondary server for the first time. Also, you can perform this whenever you want to manually synchronize the data between the servers.
6. You can check the Enable automatic failover synchronization check-box after that for synchronizing any configuration change on the Primary server with the secondary server in real-time.

7. You can check the Start domain/Services after synchronization check-box to start the domain services on the Secondary server after the synchronization is performed because at the time of synchronization domain services are stopped at the secondary server.
8. Now go to the IP Substitution tab and provide the IP of the Primary server in the IP field and IP of the Failover server in the Substitution IP field. (See Figure19)

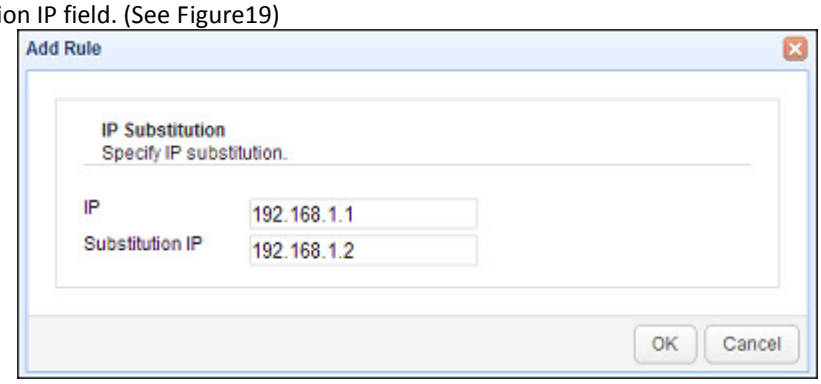


Figure19: IP Substitution Screen

You can also setup your Primary and failover JSCAPE MFT servers in Cluster for Load Balancing and proxy management. For more on Cluster setup refer to Appendix- *ConfigureJSCAPECluster*

Configure Trading Partner Accounts

In JSCAPE you will have to create Trading Partner profiles to communicate with the clients for data exchange. Follow the below steps to create Trading Partner.

1. Login into the JSCAPE MFT server Web Interface.
2. Go to “Domains” tab and select the domain created in above steps.
3. After selecting the domain click on the “Edit” button at the bottom.
4. Select the “Trading Partners” options from the left pane of the window. Click on the “Add” button to add a new Trading Partner.(See Figure20)

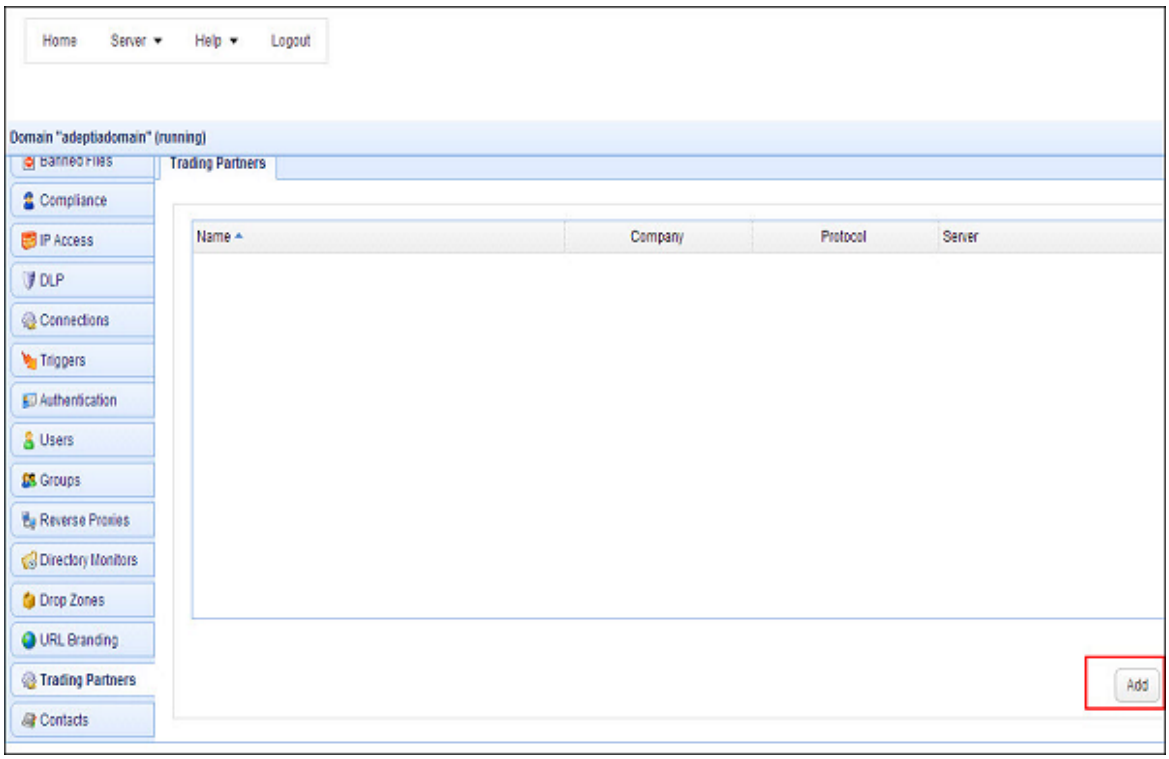


Figure20: Trading Partner Pane for Domain

5. A new "Add Trading Partners" screen will show up and select the desired communication protocol.(See Figure21)

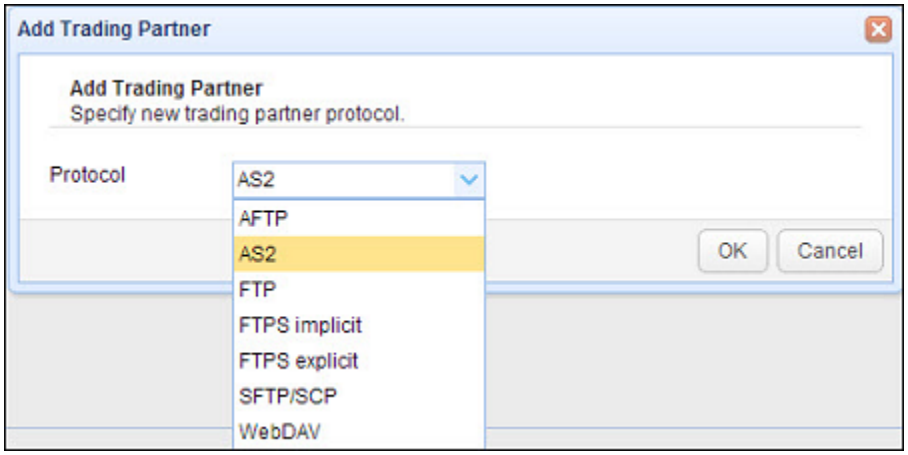


Figure21: Trading Partner Protocol Selection Screen

6. Provide the name and other details for the Trading Partner. (See Figure22)

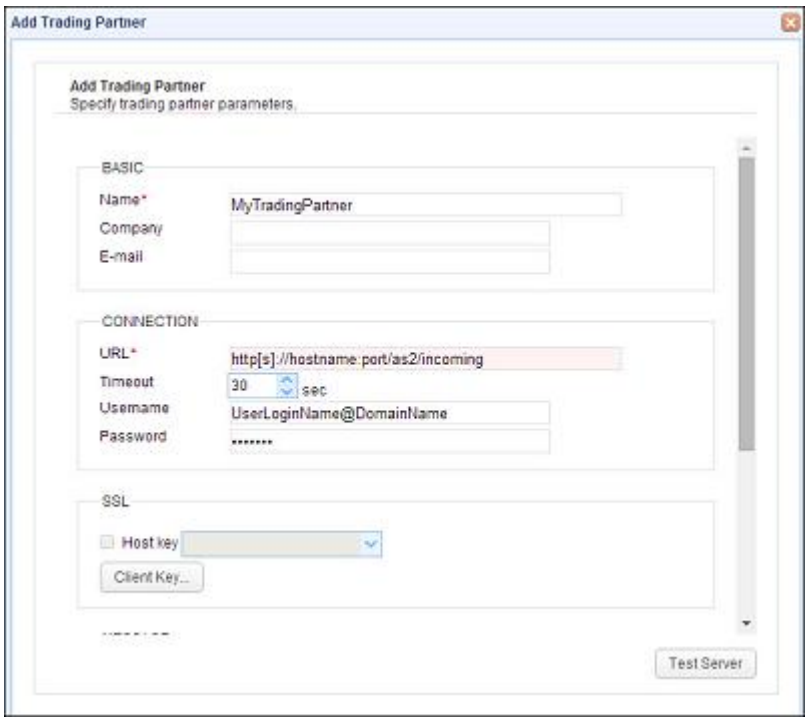


Figure22: Trading Partner Configuration Screen

7. Then scroll down on the screen and provide all the remaining parameters to configure the partner. (See Figure23)

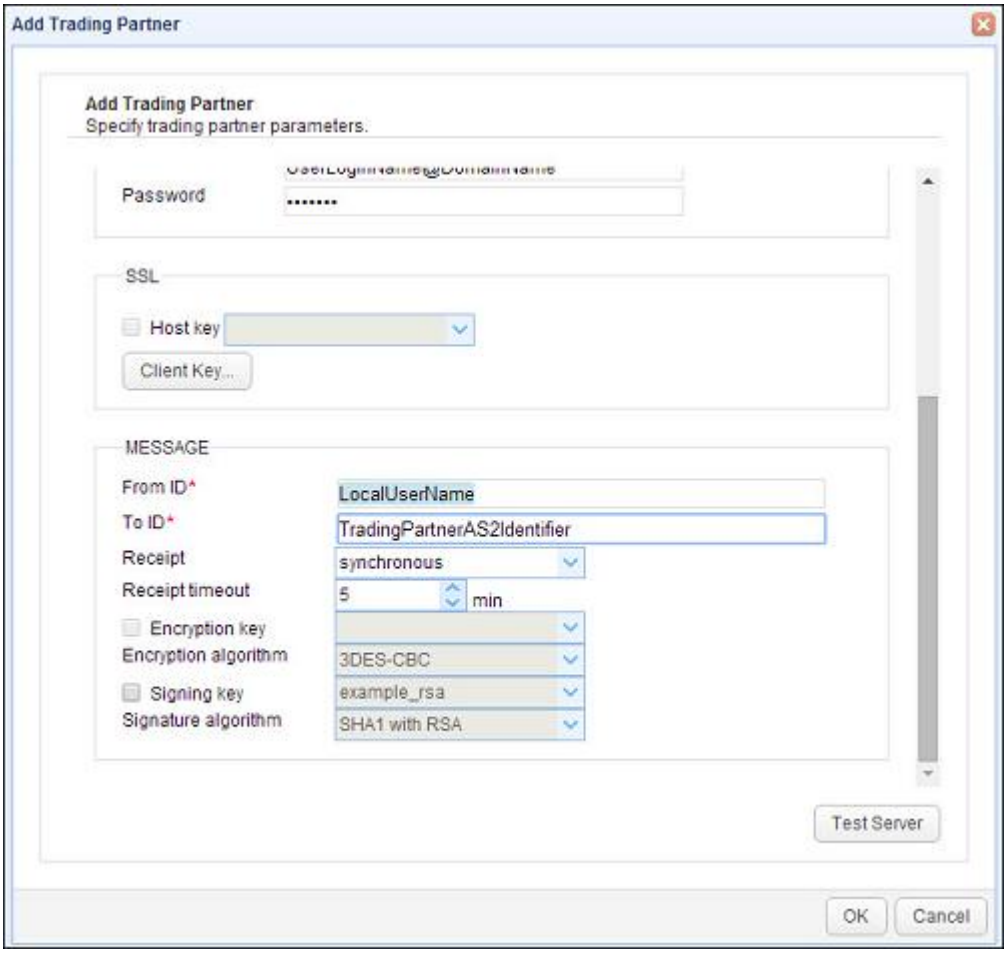


Figure23: Trading Partner Server Screen

***URL**: provide the URL for communicating to the partner over AS2 protocol.*
***Username**: username of the partner. Ex. user@domain*
***Password**: password provided by the trading partner for its user.*
***From ID:** provide your JSCAPE username.*
***To ID:** provide the username of the trading partner.*
***Encryption key**: select the certificate provided by client from the Host key if you wish to send encrypted messages to your trading partner.*
***Signing key:** select your signing key from the server key if you want to sign the outbound messages for that trading partner.*

8. Click on the "Test Server" button at the left bottom if you wish to verify trading partner details. After that click on OK button to apply the changes.(See Figure24)

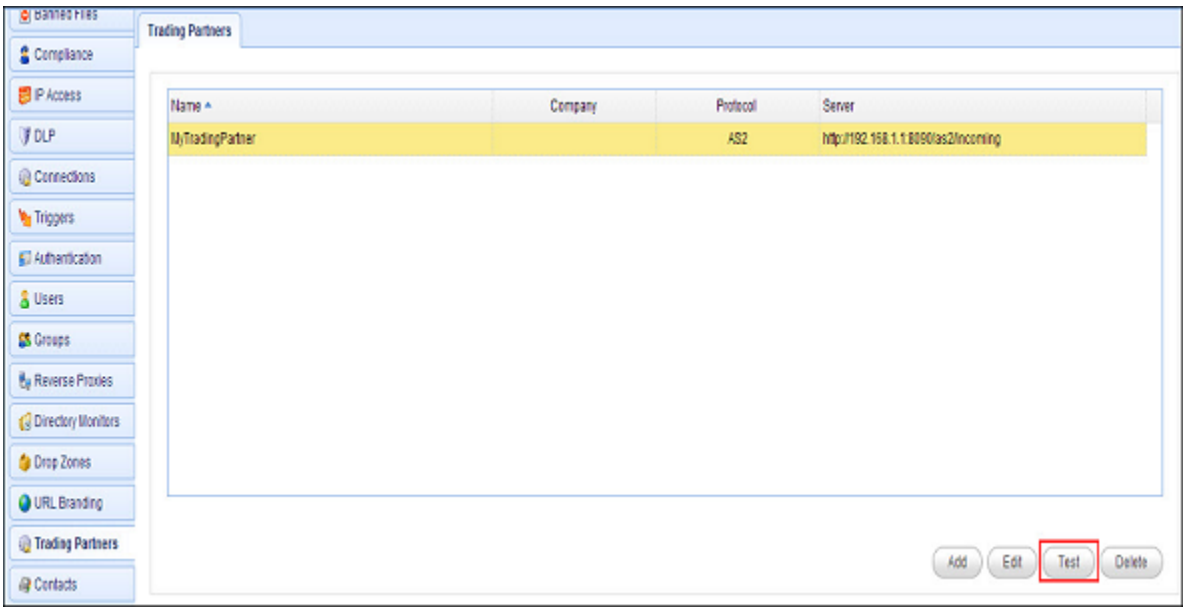


Figure24: Trading Partner Created

Configure JSCAPE with Adeptia

JSCAPE stores all incoming AS2 messages (files) in the "Upload directory" provided in the Server > Settings > Web > AS2 Directory field.

Adeptia will read the files received through JSCAPE for further processing or information retrieval. To enable Adeptia picking the files below configuration steps are required to be followed on both JSCAPE and Adeptia Server.

CONFIGURATIONS FOR JSCAPE

- Create Trigger in JSCAPE to run a batch file that will invoke a utility to rename and move the file.
- Bind the Trigger with SQL Query Action to log the incoming messages in Adeptia Log Database.

A single Trigger with "File Upload" option selected as Event type can be created to pick the files from all the Trading partners and performing above stated actions on them. A single trigger can have multiple actions defined which can be performed on the priority basis.
For Batch file you can contact Adeptia Support as they will provide a utility having the batch file and instructions to deploy.

Create Trigger in JSCAPE to run a Batch file to rename file with unique identifier

Follow the below steps to call a batch for renaming the file with unique identifier for Adeptia.

1. Login into the JSCAPE MFT server Web Interface.
2. Go to "Domains" tab and select the domain.
3. After selecting the domain click on the "Edit" button at the bottom.
4. Select the "Triggers" option from the left pane.
5. Click on "Add" button and then provide the Trigger Name and Description for the trigger. (See Figure25)

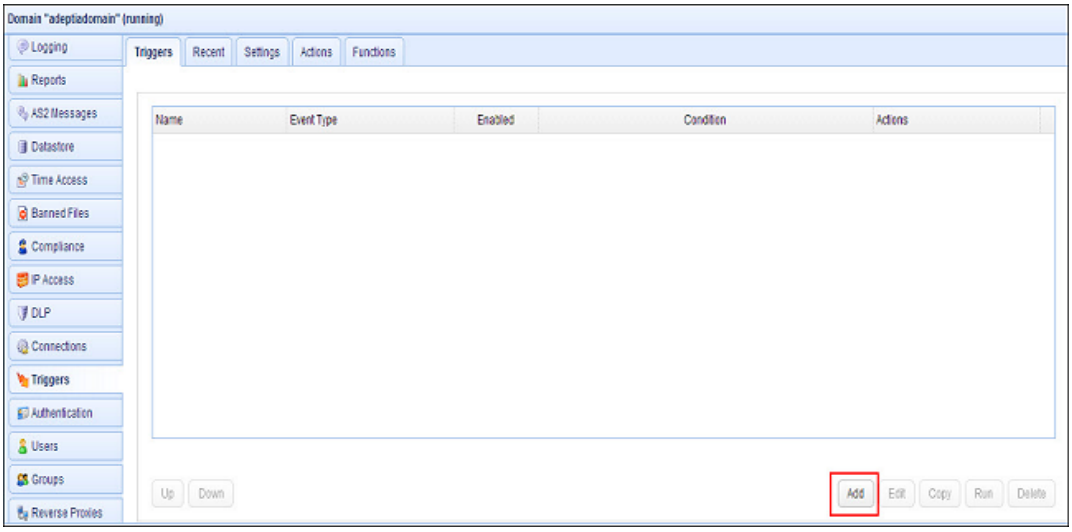


Figure25: Add Trigger Screen

6. Select the Event Type as "File Upload" and click on 'Next' button to define the Trigger Condition.(See Figure26)

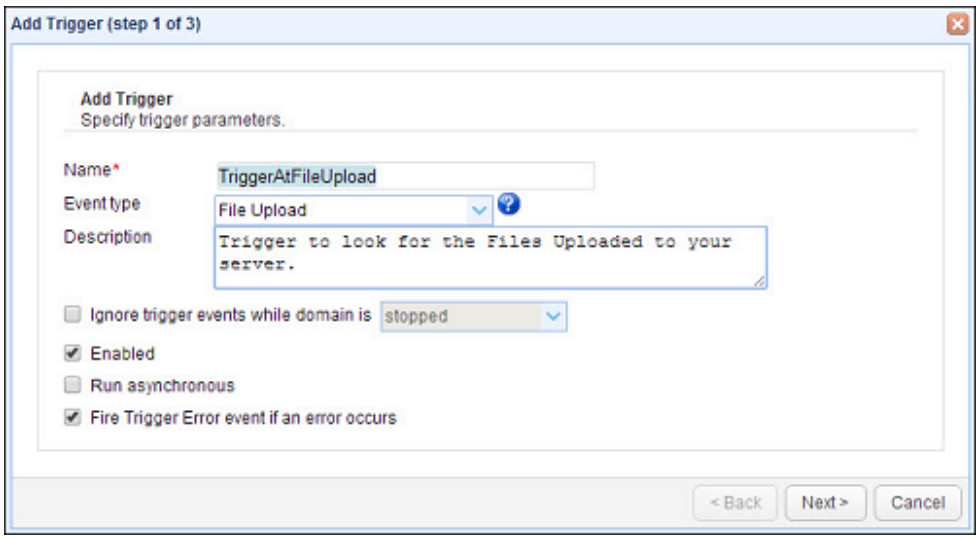


Figure26: Add Trigger Screen

7. Move to Trigger Action window and select the Action as “Run Process” and click on OK.(See Figure27)

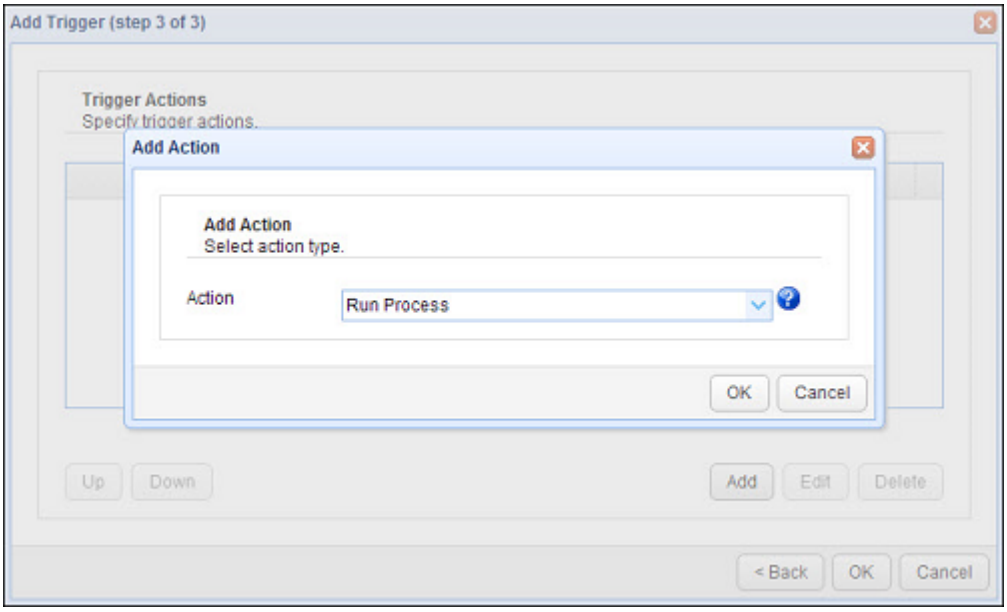


Figure27: Run Process Trigger Action

8. Provide the Absolute File Path and file name in the “Program” field for your batch file. Define the space separated arguments in the “Arguments” field; you can use pre-defined variables also. Provide the name and path for creating output and error stream for the batch execution. (See Figure28)

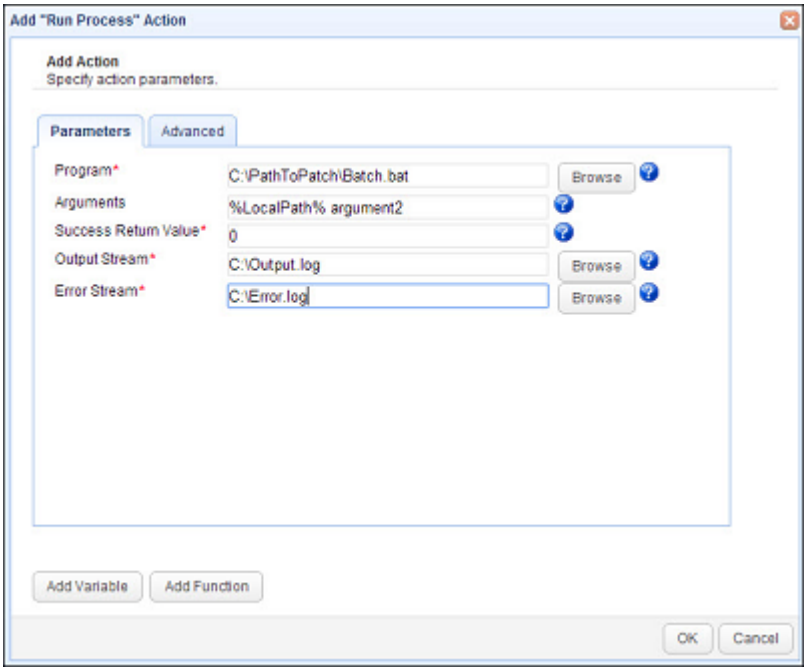


Figure28: Run Process Trigger Credentials

You can make use of the pre-defined variables for getting the path and file name of the uploaded file to be renamed by clicking on the "Add Variable" button.
You can make of pre-defined functions in JSCAPE by clicking on the "Add Function" button as per your requirements
Refer below to configure the Run Process Trigger Action
Running Batch script to rename file incoming file in jscape

9. Click OK to save and click 'Apply' to apply the changes.

Bind the Trigger with SQL Query Action to log the incoming messages in Adeptia Log Database

AS2 message information is needed to record in Adeptia Log database for further integration and processing.

Steps to be followed to Insert Data in SQL Table:

1. Access Adeptia Log database and ensure it has the table with name "AU_AS2Logs". Please create the table if it is not available.

Refer to the Appendix for SQL Queries and Instructions to apply:
SQL Query to log data into log table

2. Login into the JSCAPE MFT server Web Interface.
3. Go to "Domains" tab and select the domain.
4. After selecting the domain click on the "Edit" button at the bottom.
5. Select the "Triggers" option from the left pane.(See Figure29)

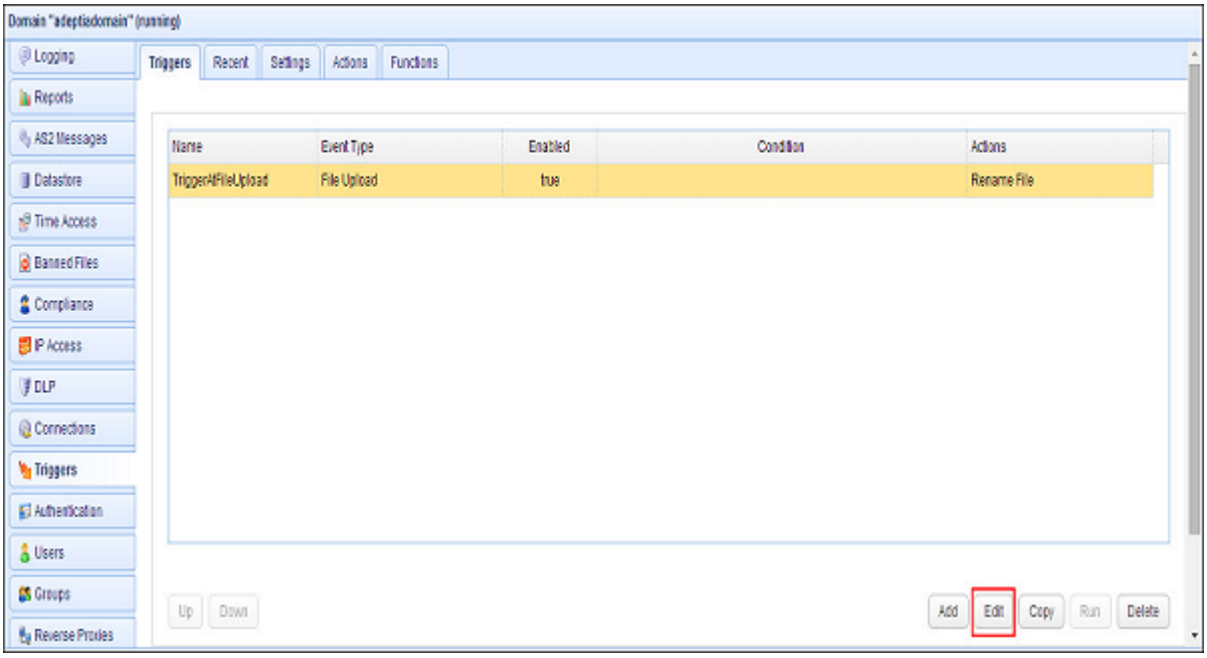


Figure29: Trigger Pane

6. Select the same trigger that was created for Run Process Action and click on “Edit” button.
7. Edit Trigger screen would be displayed. Click on 'Next' button to define the Trigger Condition.(See Figure30)

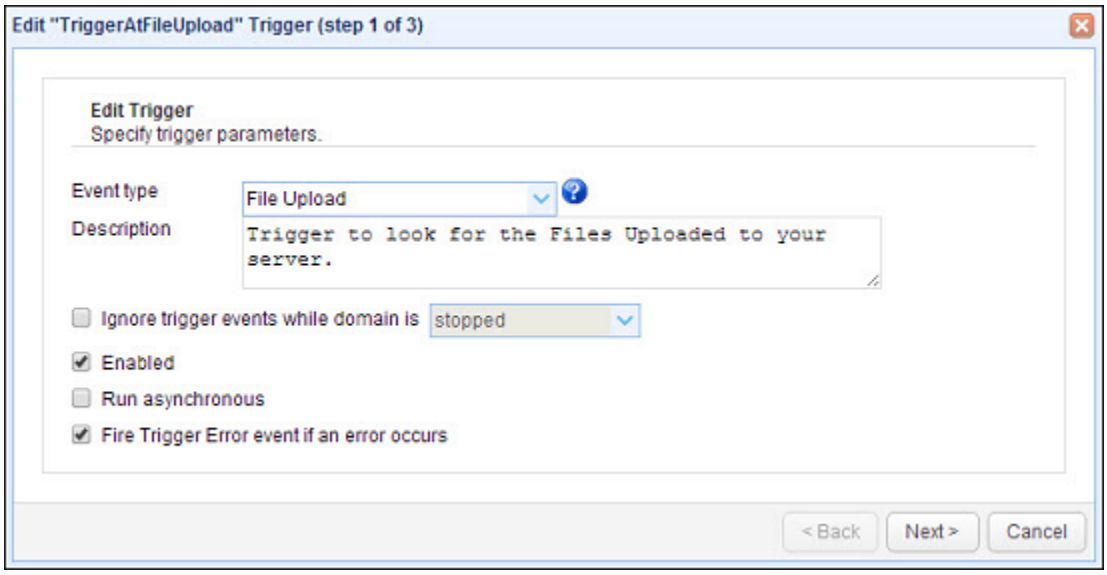


Figure30: Edit Trigger Screen

8. After that define the Trigger Action as “SQL Query” and click on OK to define the SQL Credentials.(See Figure31)

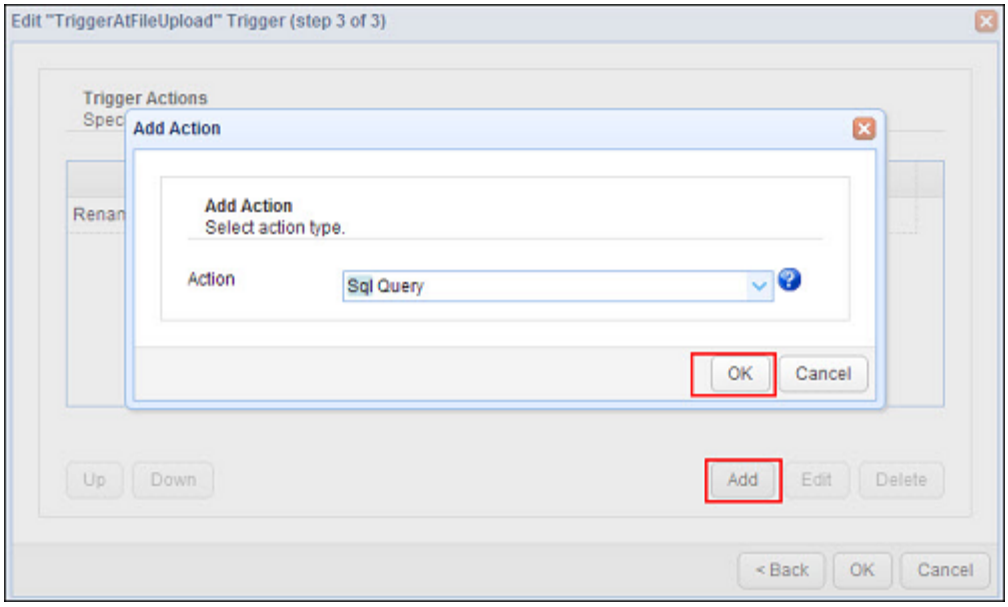


Figure31: Selecting SQL Query in Action

9. Provide the jdbc credentials in the respective fields and type in your SQL query that you want to execute through the trigger. You can also use the "Add Variable" option to insert AS2 message data into the table dynamically by making use of the pre-built variables provided by JSCAPE Server.(See Figure32)

You need to put the jdbc driver jar respective to the Database server in use, in the libs directory of the default installation directory of the JSCAPE server.
Also, you need to make an entry of the JDBC class in the Server > Settings > JDBC Drivers section before using SQL Query Action.

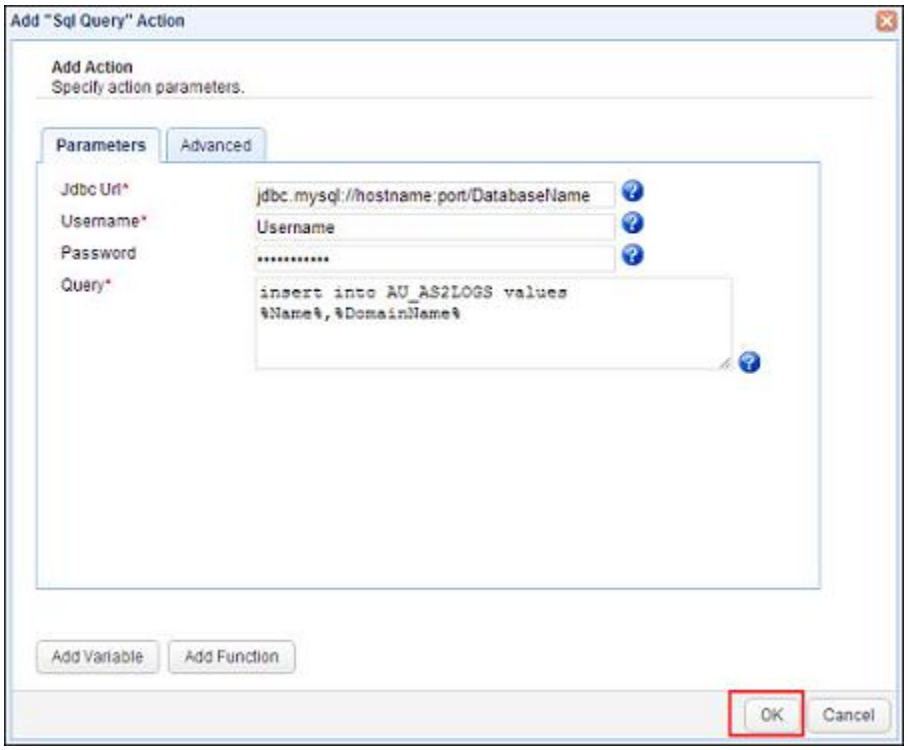


Figure32: SQL Query credentials screen

10. Click Ok to finish.
11. Select the above created event and click on “Apply” button at the bottom to apply the new changes.

CONFIGURATIONS FOR ADEPTIA

- Create a file event in Adeptia to read files from the common network location for further processing. This file event can be used in Adeptia flows or B2B to read the files.

Steps to create a file event in Adeptia to read files from the common network location for further processing

1. Login into Adeptia Server
2. Go to Develop > Events > File Event
3. Click on Create New option to create a File Event
4. Select trigger type as On File Created
5. Provide the common folder locations (used in batch file) under File Base Location.
6. In file include criteria provide the filename or any wildcard operators like-(*.*)
7. Bind the event with the process that will use the AS2 files
8. Activate the event

You can refer to Developer Guide section of Adeptia Suite for more information on Event Creation.

Receiving AS2 messages

To receive AS2 messages in JSCAPE MFT Server the sender may require from you a number of parameters. These parameters are as below:

REQUIRED PARAMETERS FOR AS2 FILE RECEIVE

URL

http[s]://hostname:[port]/as2/incoming/

Where hostname is the hostname or IP address and port is the port as set in Server > Settings > Web panel of JSCAPE MFT Server Manager Ex.https://192.168.1.1:443/as2/incoming/

Username

username@domain

Where username is the user Login name as provided during User creation and domain is the JSCAPE MFT Server domain to which the user belongs. Ex.test@localhost

Password

The password for the specified user name. Ex.password

Note: AS2 message data will be stored in the directory with name provided in the "Upload directory" field as provided in the Server > Settings > Web > AS2 Directory field. This Upload Directory will be created on the location defined in the Real Path field of the User created in the JSCAPE MFT server.

Sending AS2 messages

You can send files to the trading partner both manually as well as automatically by using Triggers.

If the incoming messages are encrypted using your public key then you can select key to decrypt the messages from decryption key drop down in Server>Setting>Web>AS2.

Sending an AS2 message manually

To send an AS2 message manually you can go to the AS2 Messages module for your domain and click the "Send File" button. You will be prompted for the AS2 trading partner and the file to send. (See Figure33)

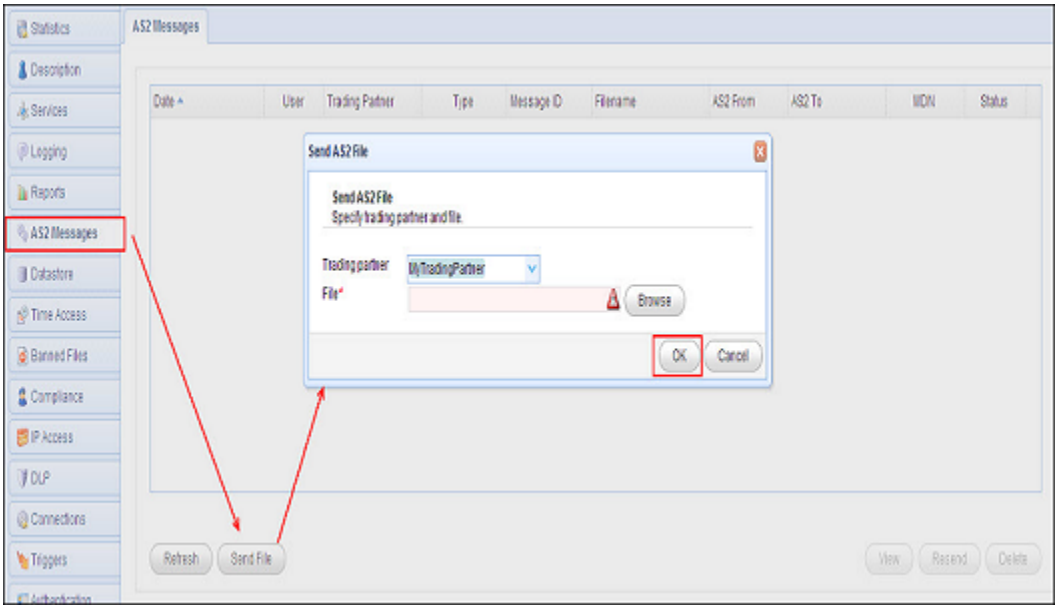


Figure33: Manually Send Files

Sending an AS2 message automatically

You can send an AS2 message automatically in response to configured events using the Triggers and the Trading Partner File Upload or Trading Partner Regex File Upload actions. The basic steps that you need to perform are to create a Trigger with “Current Time” as Event Type and select a specific partner to send files. Follow the below steps to automatically send files to trading partners when files are placed in specified folders.

CREATING TRIGGER TO SEND FILES AUTOMATICALLY

1. Login into the JSCAPE MFT server Web Interface.

2. Go to “Domains” tab and select the domain created in above steps.
3. After selecting the domain click on the “Edit” button at the bottom.
4. Select the Directory Tab and click on Add button to add a new one. (See Figure34)

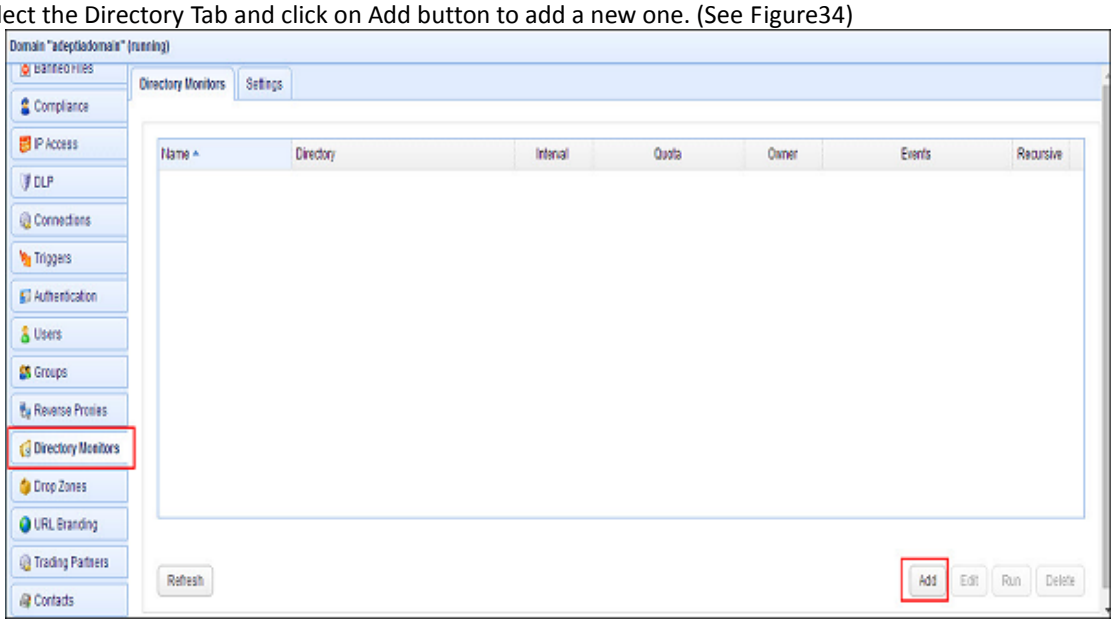


Figure34: Directory Monitor Screen

5. Provide the name and the UNC path of the network location from where you want to pick the file to transfer. (See Figure35)

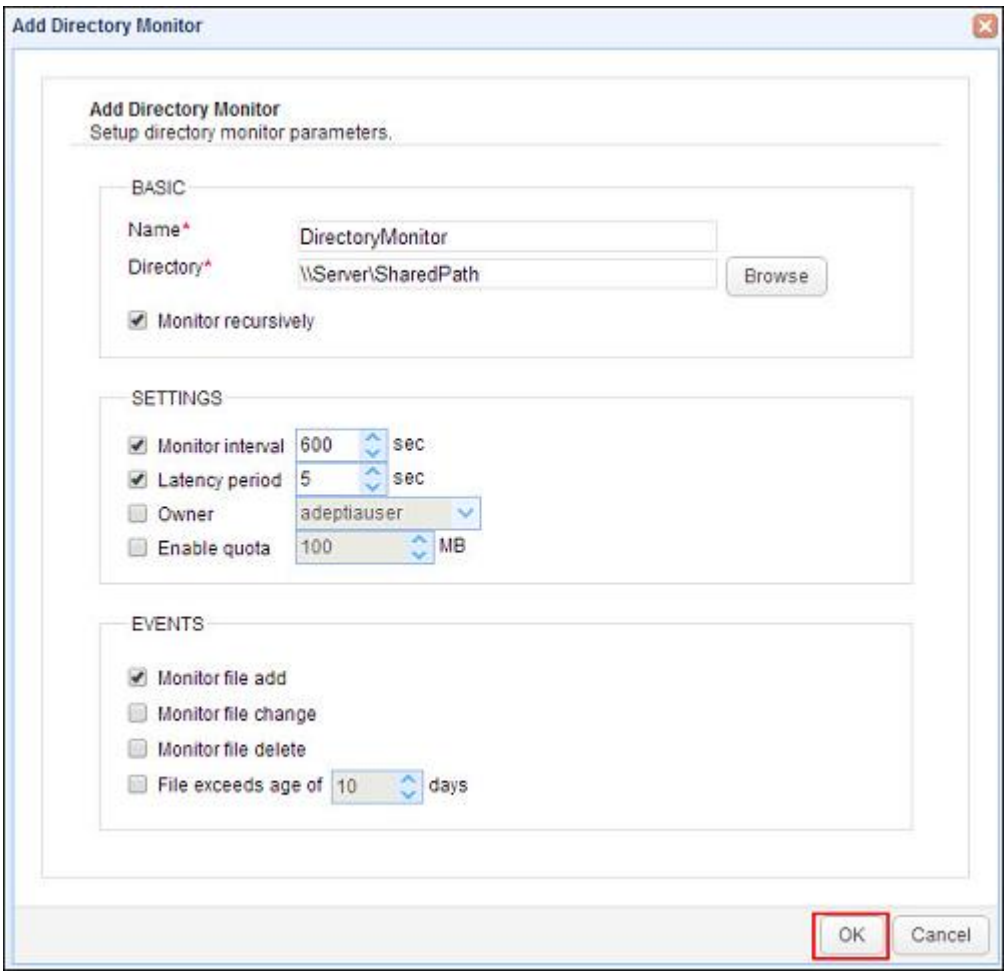


Figure35: Directory Monitor Settings

6. Now go to the “Triggers” option from the left pane. (See Figure36)

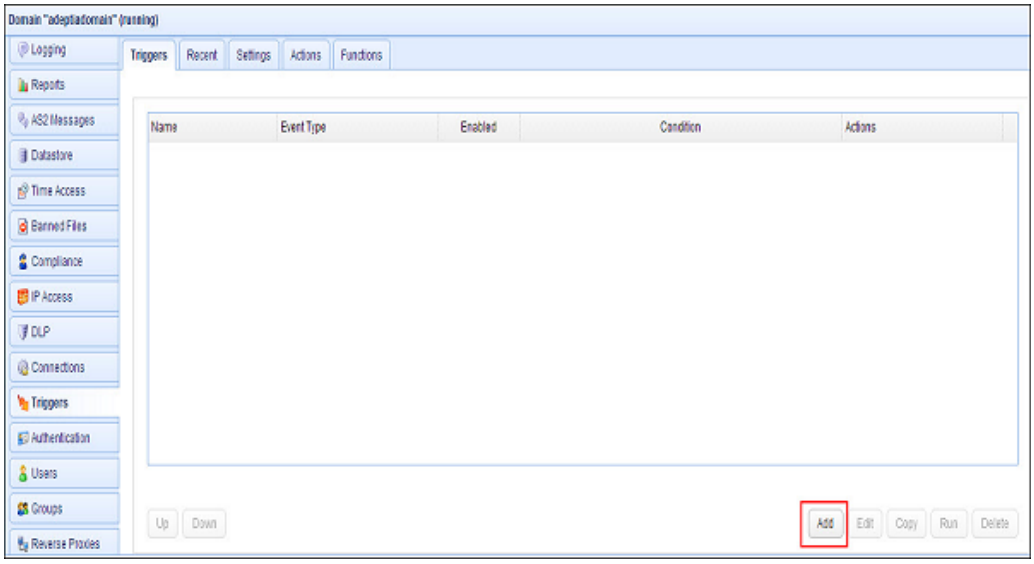


Figure36: Triggers Pane for Domain

7. Click on the “Add” button to add a new Trigger.
8. Provide the name in the Name field and then select the Event type from the EVENT TYPE drop-down as “Directory Monitor File Added”.(See Figure37)

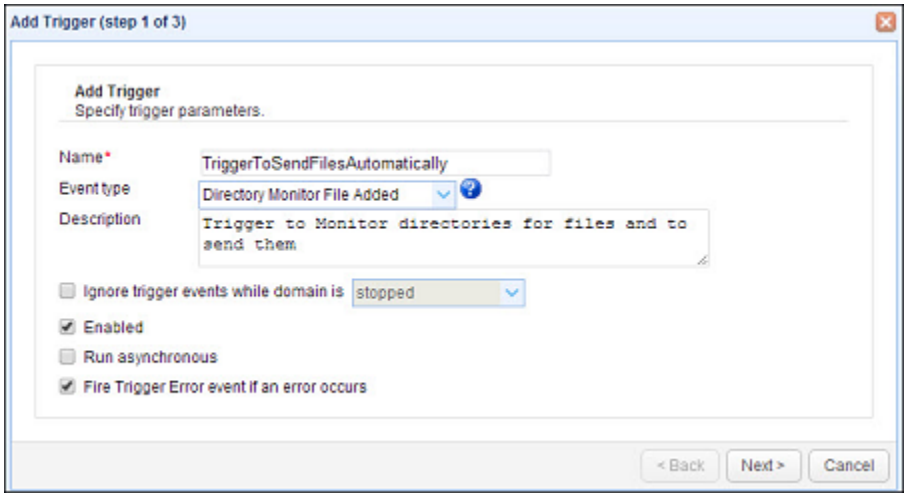


Figure37: Triggers Creation Step1

9. Click on Next button and then configure the Trigger Condition if you have a need to run the action associated with the Trigger to execute only after the Trigger condition gets satisfied.
10. Proceed next to add a Trigger Action that could to be performed on the occurrence of the event. Click on the “Add” button at bottom and select an appropriate action from the Add Action screen. You can select “Trading Partner Regex File Upload” option and click on OK to configure details regarding this action.(See Figure38)

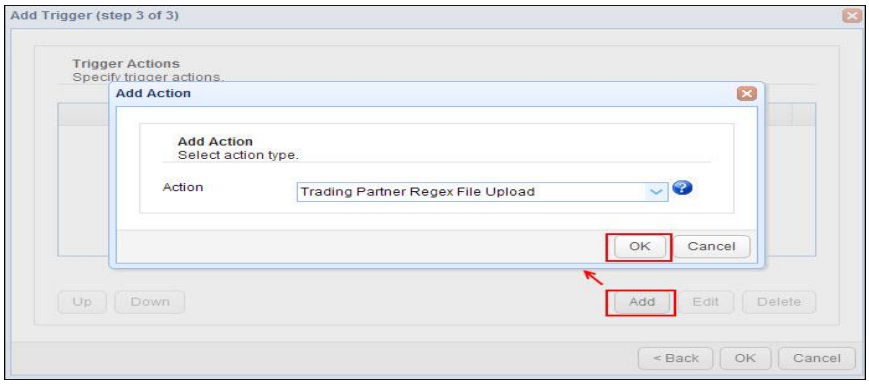


Figure38: Triggers Creation Step3

11. Select the Trading Partner to send file from the "Partner" drop-down on the "Add Trading Partner Regex File Upload Action" screen.
12. Browse the Local directory from where you want to send the files to the Partner. Also, configure the Regular expression that will be used to filter out files from the list of files to be sent to the Trading partner.(See Figure39)

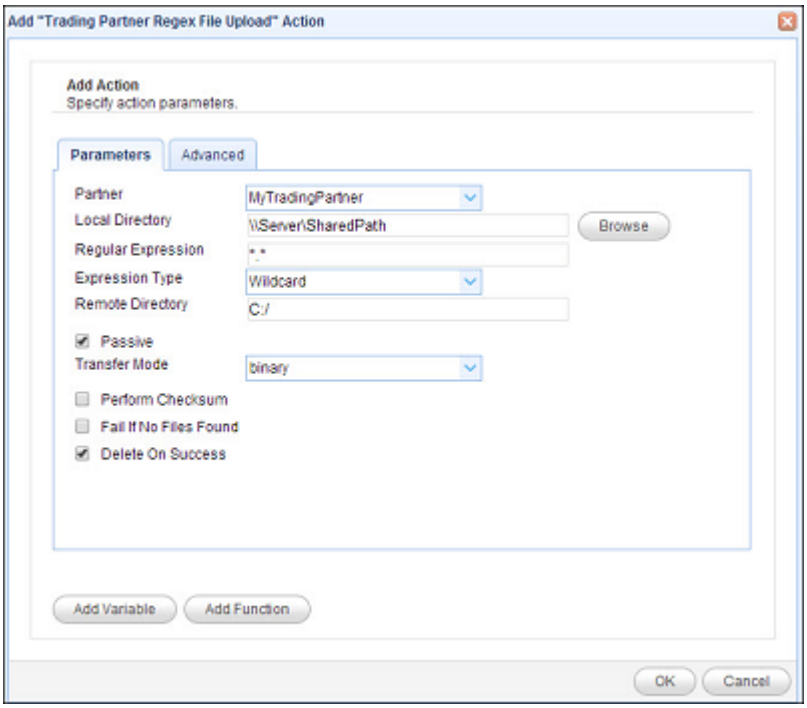


Figure39: Triggers Action Creation

***Partner**: Select the Trading partner to send file*
***Local Directory**: Directory path from where the files should be picked for data exchange*
***Regular Expression**: Files matching the expression would be picked for transfer*
***Remote Directory**: Directory path where the files would be stored on trading partner or client machine*

13. Configure other parameters as per requirement and click on OK button to save and apply changes.(See Figure40)

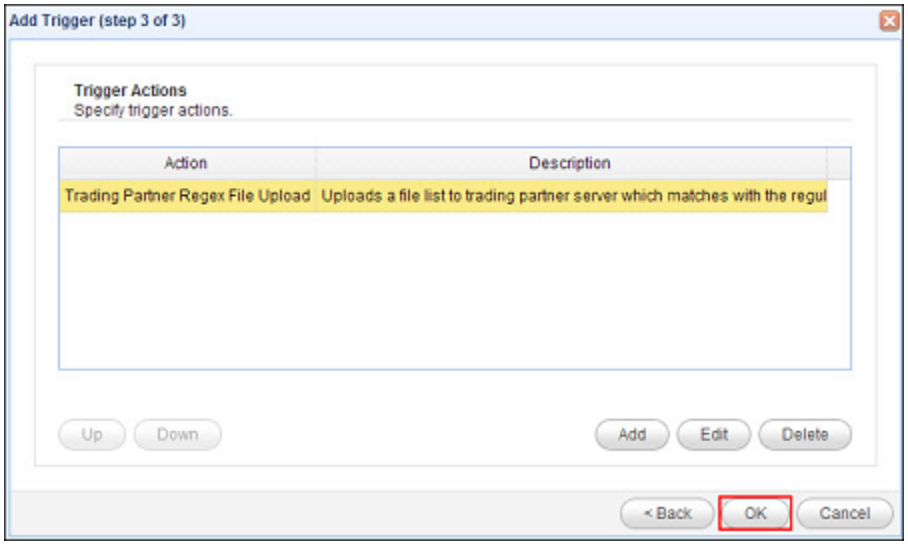


Figure40: Triggers Action Created

14. After this you can see the newly created event in the Triggers Screen for your domain. Select the trigger and click on the “Apply” button at the bottom to save and apply the changes.

Resending an AS2 message

You can manually resend an AS2 message. For this select the “AS2 Messages” from the left pane of your domain services. Browse for the desired message from the AS2 Messages module and click the "Resend" button. (See Figure41)

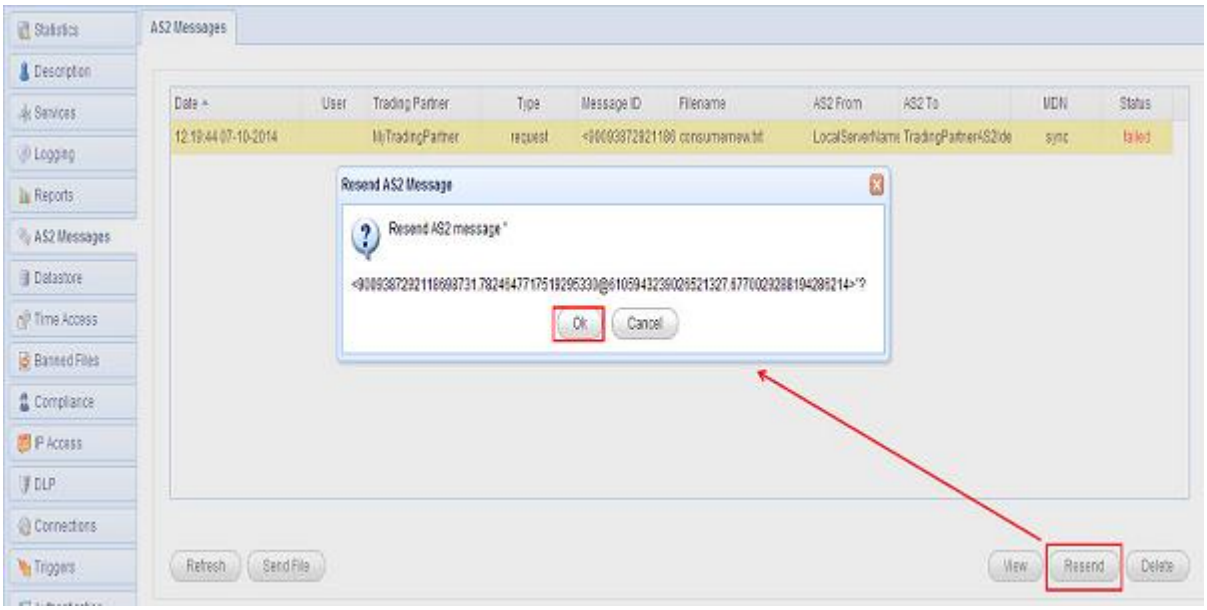


Figure41: Resend AS2 Message

Viewing AS2 messages

A history of all AS2 messages sent and received for a domain is maintained under “AS2 Messages” module in JSCAPE MFT Server Manager. You can select any message there and view its details.

Configure JSCAPE Server Backup

It is always advised able to take backup of your applications as in case of any disaster we can redeploy the backups and start are applications without much loss of time. You can also define Triggers in JSCAPE to automatically take backups of your server at regular intervals.

Steps to setup Automatic Backup

You can follow below steps to configure automatic backup.

1. Login into the JSCAPE MFT server Web Interface.
2. Go to “Domains” tab and select the domain.
3. After selecting the domain click on the “Edit” button at the bottom.
4. Select the “Triggers” option from the left pane.
5. Click on “Add” button and then provide the Trigger Name and Description for the trigger.
6. Select the Event Type as “Current Time” and click on 'Next' button to define the Trigger Condition.(See Figure42)

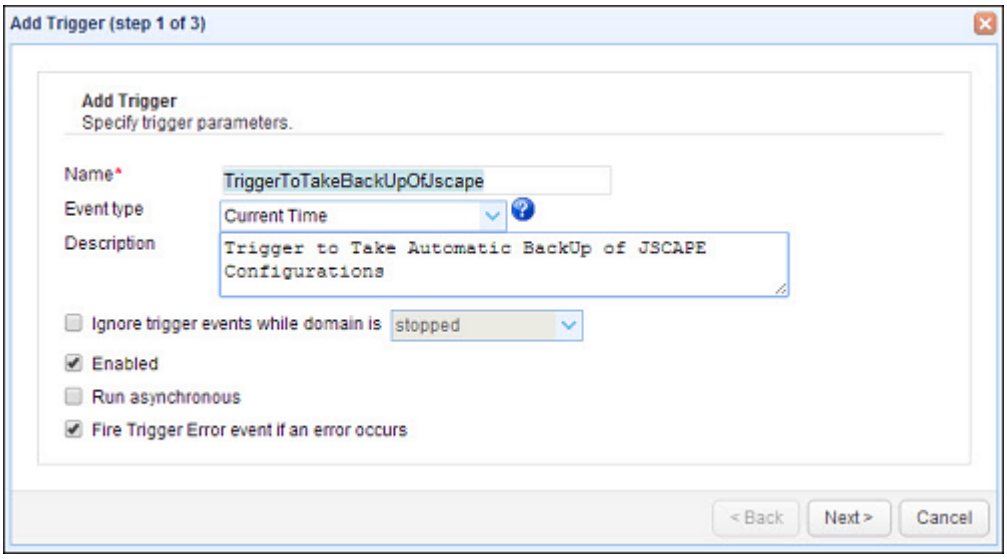


Figure42: Current Time Event Action

7. In the Trigger Condition define the time conditions when you want to perform the backup. Ex. Below image shows condition to run back-up on every Monday at 8 PM in evening.(See Figure43)

Figure43: Trigger Condition Screen

8. Click on Next and select the Trigger Action as “System Configuration Backup” and click on OK.(See Figure44)

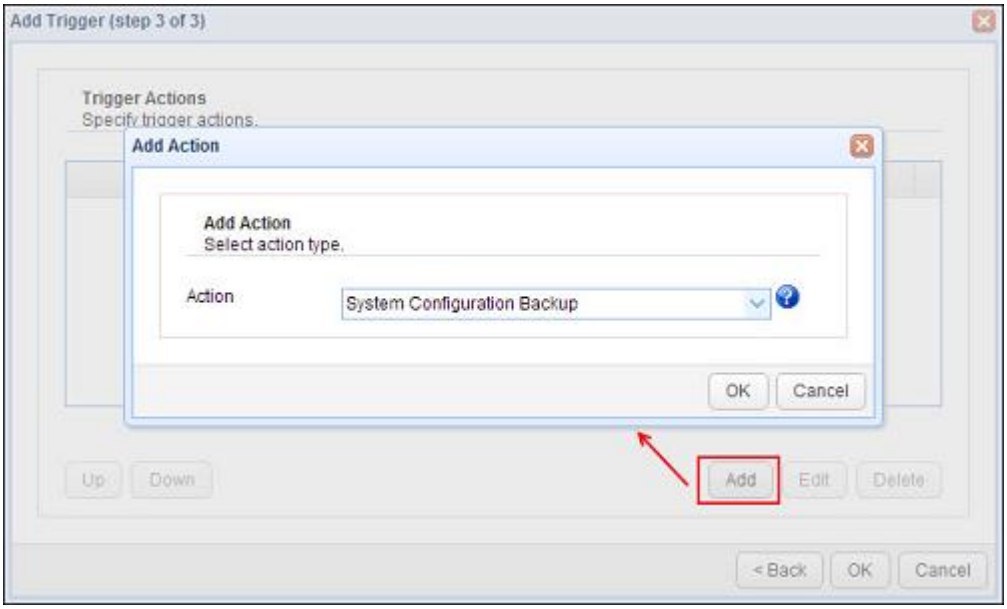


Figure44: System Configuration Trigger Action

9. Populate the required parameters and click on OK.(See Figure45)

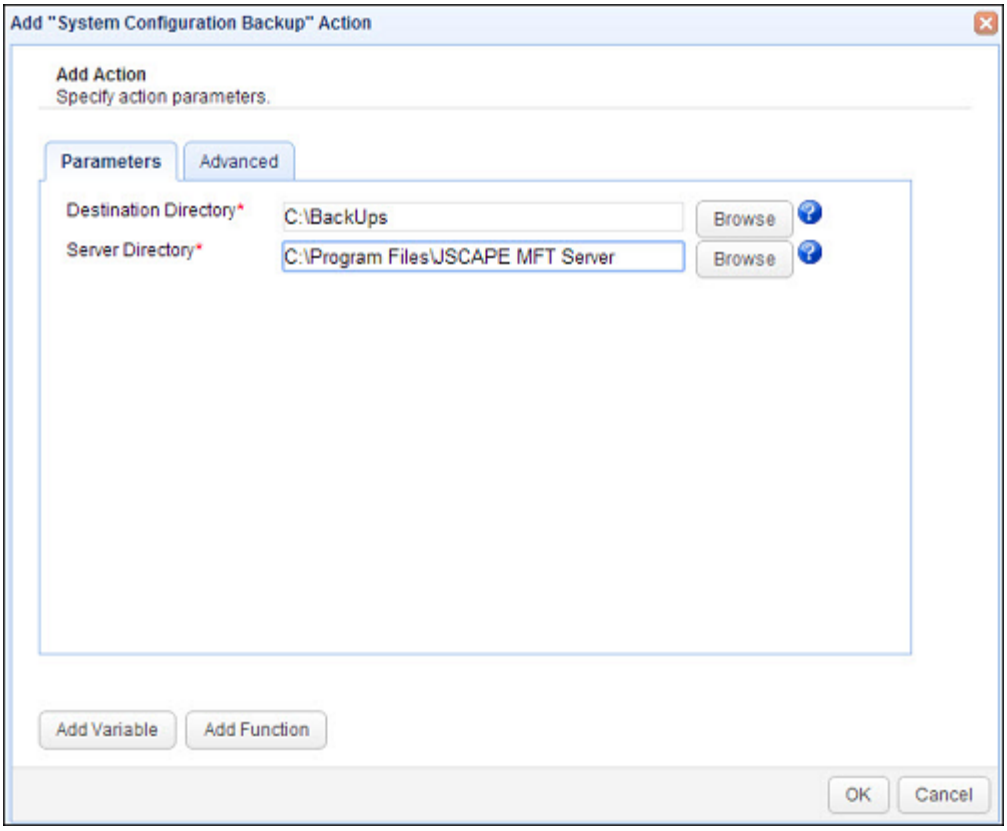


Figure45: System Configuration Backup credentials screen

10. Click OK to finish and click “Apply” to apply the changes.
11. Select the trigger and click Run to verify that the backup archive is created successfully.

Appendix

CONFIGURE JSCAPE IN CLUSTER FOR LOAD BALANCING

We can establish two JSCAPE MFT Servers in cluster to perform load balancing for the incoming data traffic. Load balanced servers help us to achieve high availability for your critical file transfers. To setup JSCAPE MFT servers in cluster you need to install and configure the JSCAPE MFT Gateway application. Below section explains the steps to install and configure JSCAPE MFT Gateway to setup cluster.

Pre-requisite

- Two JSCAPE MFT Servers installed and configured as Failover that should have the same configurations, i.e. same users, same services, etc.
- A machine equipped with two NICs. One NIC on your machine should connect to the network containing your JSCAPE MFT servers, while the other NIC should connect to the network containing your client(s) i.e. Internet and should have static IP. The machine should be a different server other than the machines on which JSCAPE Failover is setup.

Step to Install JSCAPE MFT Gateway

To install JSCAPE MFT Gateway on a Windows platform perform the following:

1. Download JSCAPE Gateway on a different server other than JSCAPE Failover setup.
2. Run the install.exe installation file for JSCAPE MFT Server.

> *You can download JSCAPE MFT Gateway from http://www.jscape.com.*
> *The direct link to download JSCAPE MFT Gateway is http://www.jscape.com/downloads/jscape-reverse-proxy*

3. Follow the steps in the installation wizard and complete the installation process.(See Figure46)

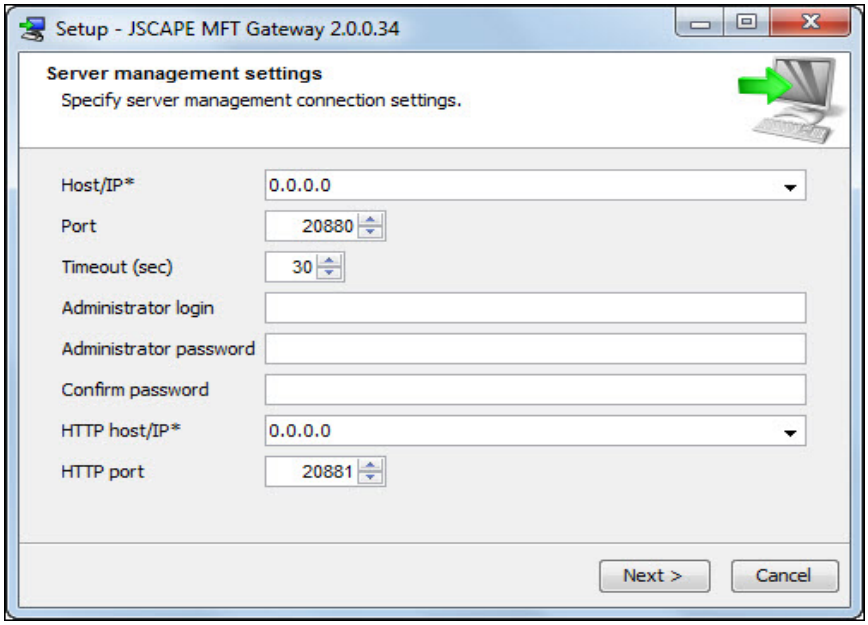


Figure46: Installation Wizard Screen

> ***Host/IP:*** *Provide the hostname or IP of the machine to install the JSCAPE Gateway*
> ***Port****: By default JSCAPE Gateway service runs on 20880 port but you can also change it.*
> ***Administrator login:*** *Provide the login name to run the JSCAPE Gateway service as administrator.*
> ***Administrator password:*** *Provide the password for administrator*
> ***HTTP host/IP:*** *Provide the hostname or IP of the machine where you are installing JSCAPE Gateway to access Gateway application over HTTP.*
> ***HTTP Port:*** *Provide the port on which you want to access the Gateway application through your browser over HTTP. By default it is 20881.*

4. If you are running any firewall software make sure that it is setup to allow JSCAPE MFT Gateway to run.
5. Start the JSCAPE MFT Gateway Service.
6. Launch JSCAPE MFT Gateway and it will ask you for the credentials to login into the Gateway Desktop manager.(See Figure47)

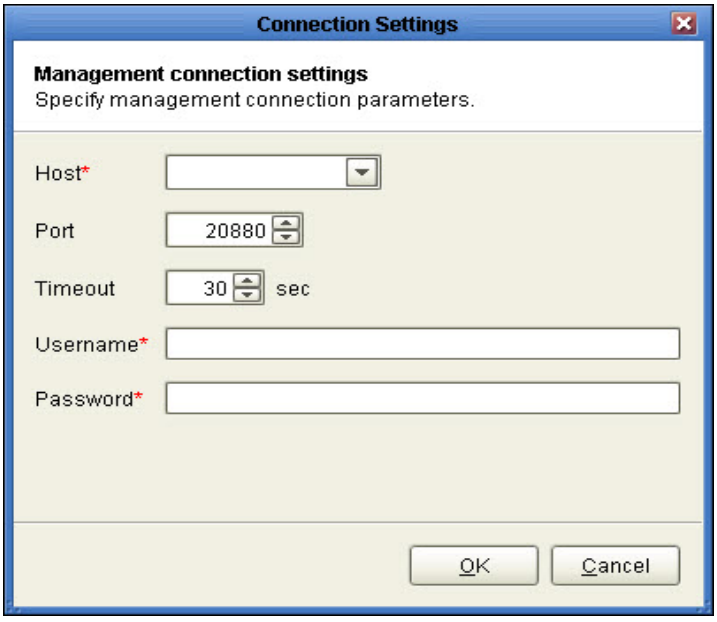


Figure47: JSCAPE MFT Gateway Login Screen

Host/IP: *Provide the hostname or IP configured during installation of JSCAPE Gateway.*
Port*: Provide the port configured during installation of JSCAPE Gateway.*
Username: *Provide the administrator login name configured during installation of JSCAPE Gateway.*
Password: *Provide the administrator password configured during installation of JSCAPE Gateway.*

Adding a Cluster in JSCAPE MFT Gateway

To configure a cluster in JSCAPE MFT Gateway follow the below steps:

1. Run the Gateway Desktop manager application.
2. Go to “Clusters” option displayed on the left pane.(See Figure48)

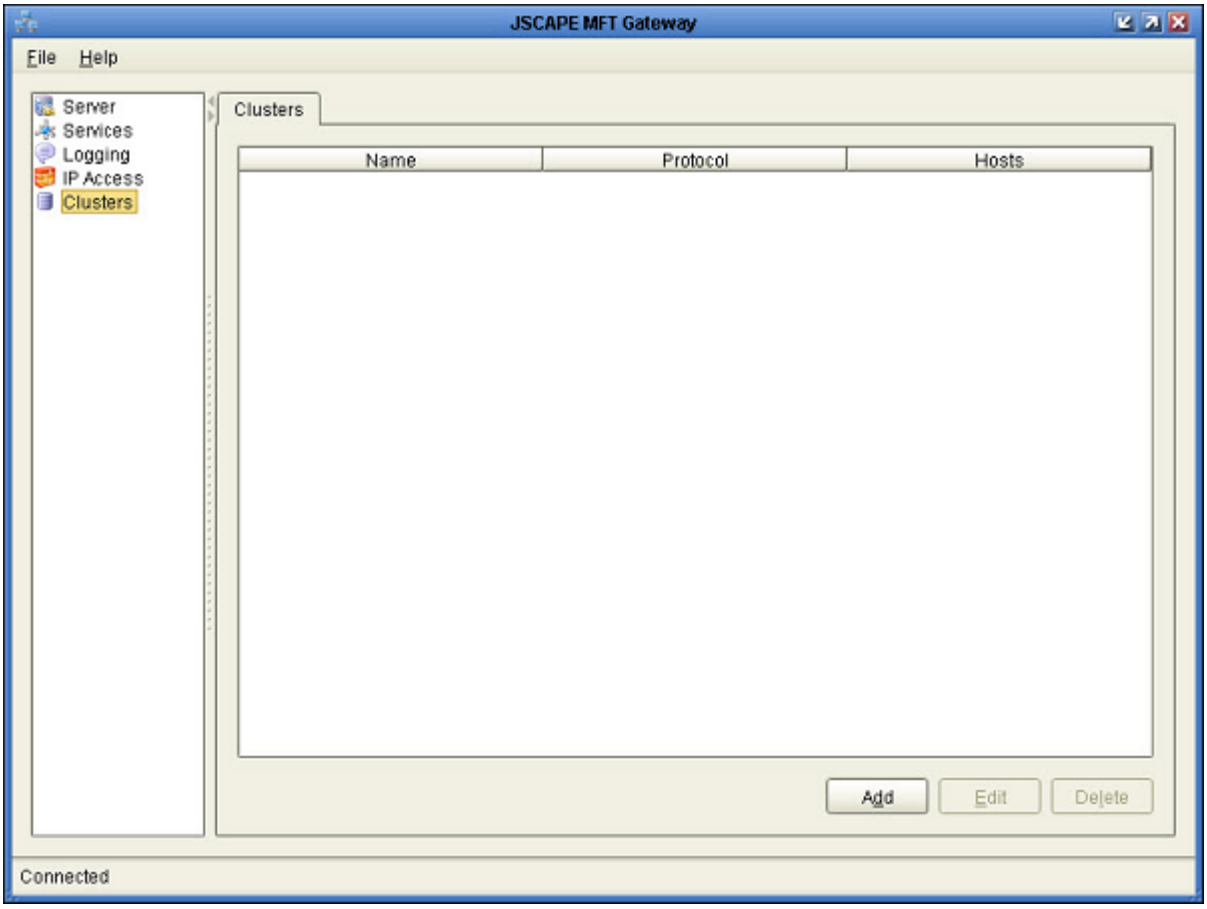


Figure48: JSCAPE MFT Gateway Screen

3. Click on 'Add' button to add a new cluster. A new window would pop-up.(See Figure49)

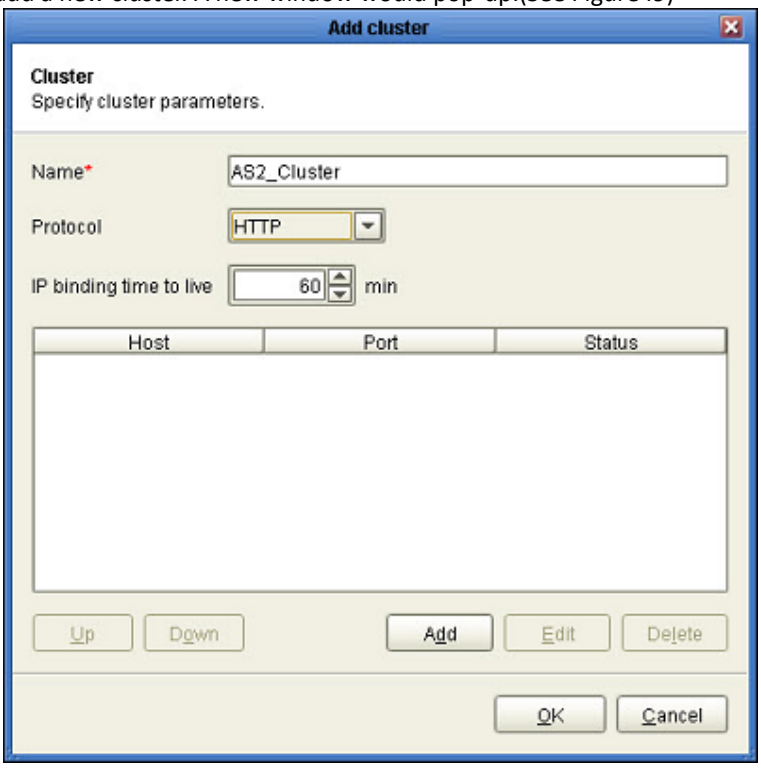


Figure49: Add Cluster Screen

4. Provide the name for your cluster and select the protocol as “HTTP”. Now click on “Add” button on bottom of “Add Cluster” screen to add hosts/nodes to your cluster. A new ‘Add Host’ would open up.(See Figure50)

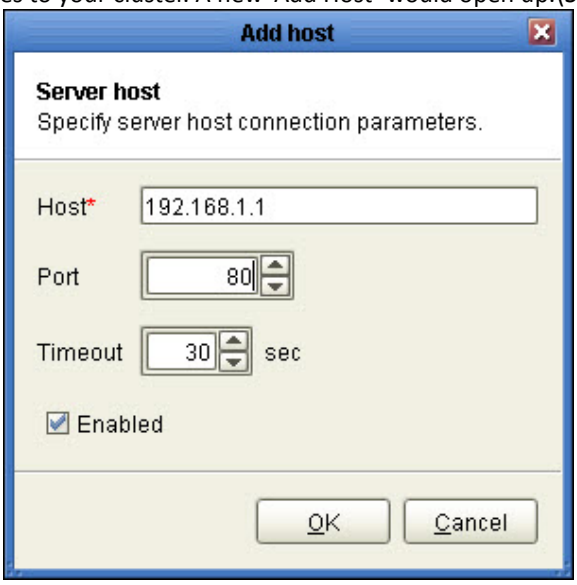


Figure50: Add Host Window

Host: *Provide the hostname or IP of the Primary JSCAPE MFT Server.*
Port*: Provide the port on which HTTP services are running on Primary JSCAPE MFT server.*
Note: 192.168.1.1 is given for demonstrative purpose only, your Primary JSCAPE MFT Server may have been configured on some other host or IP.

5. Click on Ok to add the first host to the cluster. Now again repeat step 4 to add second host (JSCAPE MFT Failover server) to your cluster.(See Figure51)

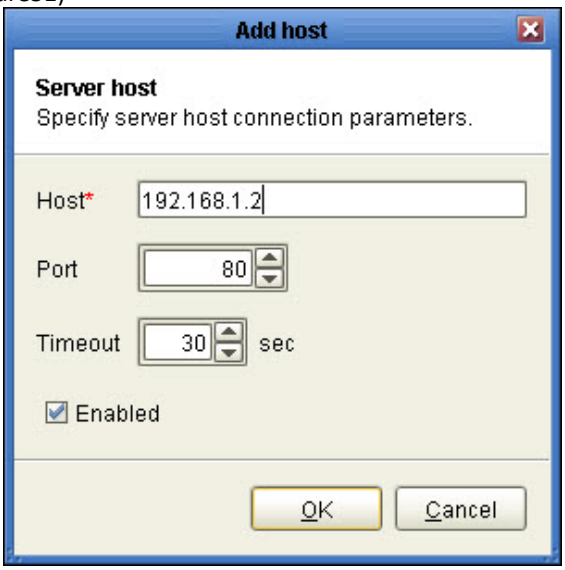


Figure51: Add Host Screen

Host: *Provide the hostname or IP of the Failover JSCAPE MFT Server.*
Port*: Provide the port on which HTTP services are running on Failover JSCAPE MFT server.*
Note: 192.168.1.2 is given for demonstrative purpose only, your Failover JSCAPE MFT Server may have been configured on some other host or IP.

6. Click on OK button after configuring the failover node in the cluster. Now you would see both the host under the Add Cluster screen.(See Figure52)

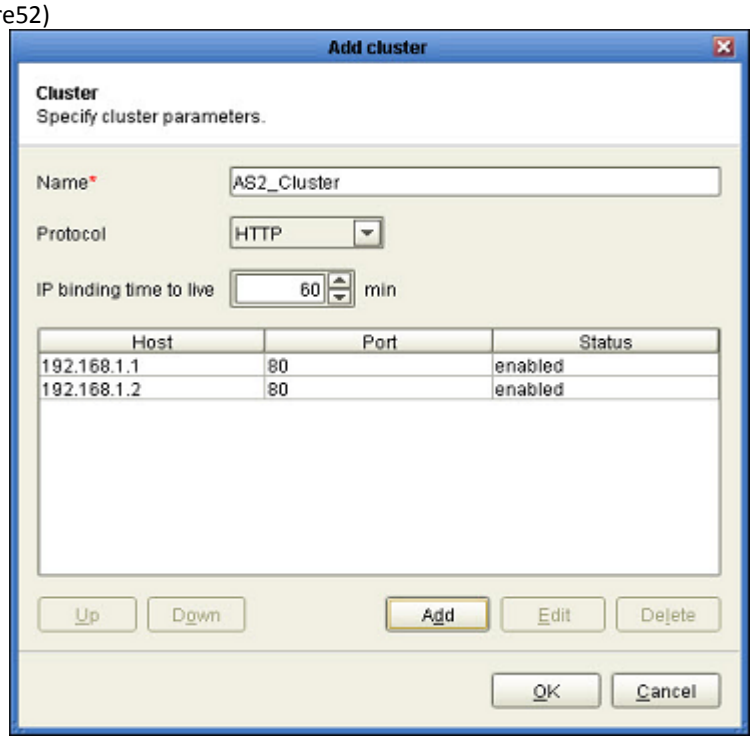


Figure52: Add Cluster Screen with configured Hosts

7. Click on OK to create the cluster. You could now see your cluster created on JSCAPE Gateway Manager Screen.(See Figure53)

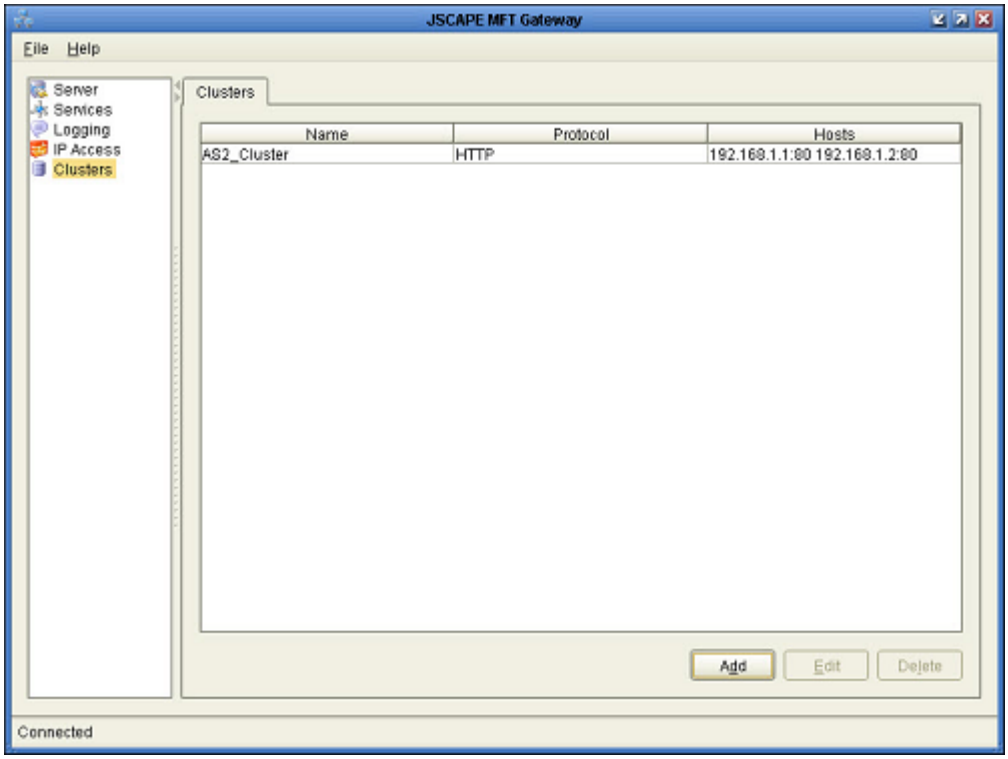


Figure53: JSCAPE MFT Gateway screen

Adding the HTTP service

To configure service in JSCAPE MFT Gateway follow the below steps:

1. Run the Gateway Desktop manager application.
2. Go to “Services” option displayed on the left pane.(See Figure54)

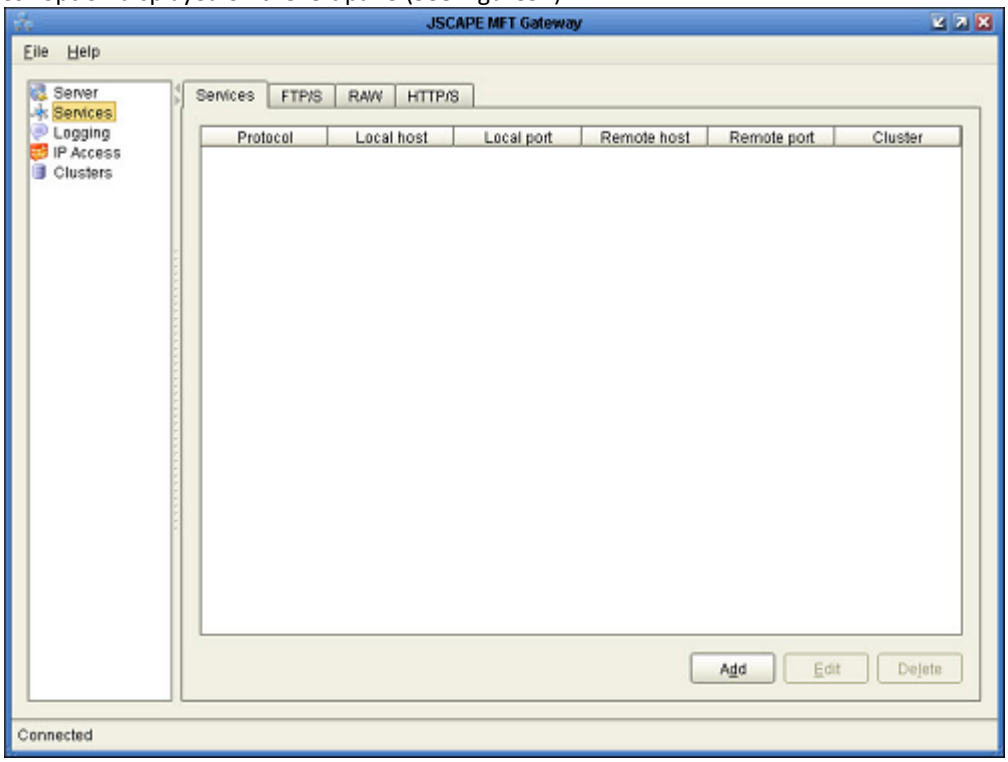


Figure54: JSCAPE MFT Gateway Screen

3. Click on ‘Add’ button to add a new service. A new window would pop-up.(See Figure55)

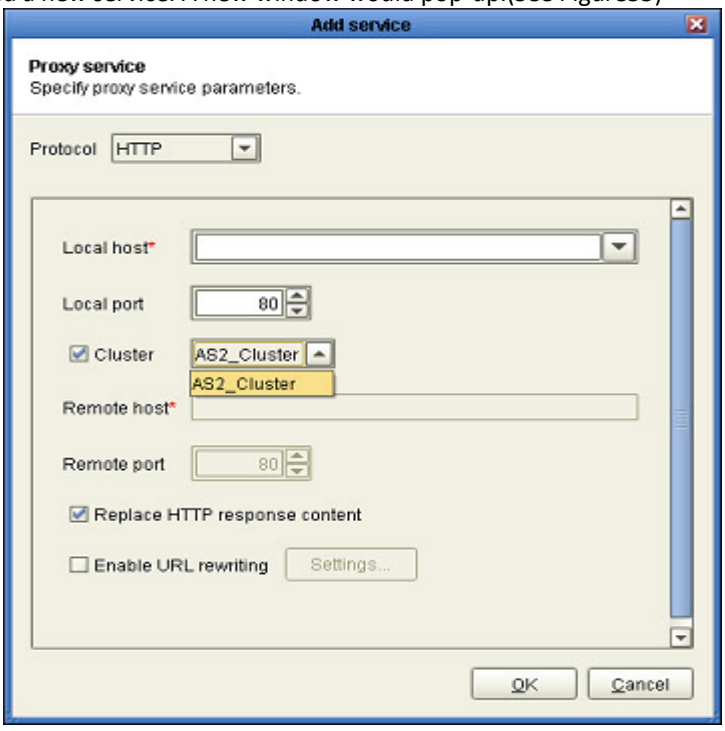


Figure55: Add Service Screen

Local Host: *Provide the static hostname or IP of the server that will be used by your clients to exchange data.*
Port*: Provide the port that will be used by your clients to exchange data.*
You need to provide the Client with following URL so that they can exchange data with you:-
http://localhost:Port/as2/incoming
where, Local host and port are the IP and port as configured above.

4. Check the "Cluster" check-box and select the cluster created by you for JSCAPE MFT Server. Click on OK to create the service.
5. You can now see your service created on the Service Pane.(See Figure56)

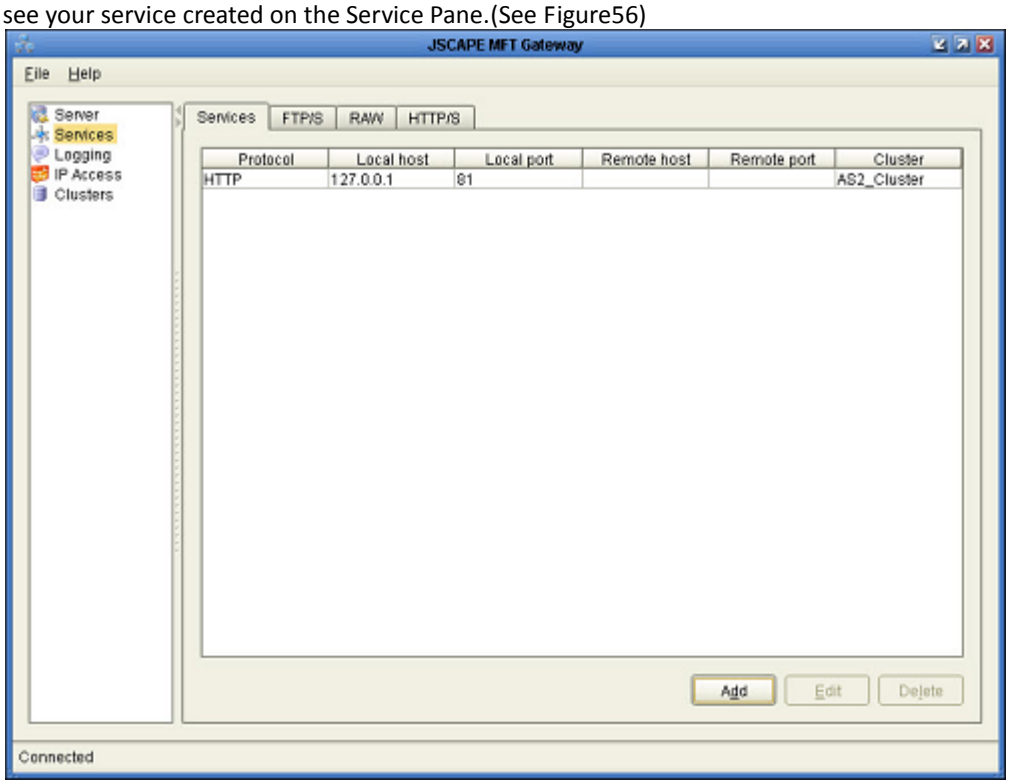


Figure56: JSCAPE MFT Screen with Service configured

Enable HTTP service on JSCAPE MFT Server

You need to enable HTTP service on the Primary JSCAPE MFT server in order to receive messages routed from JSCAPE MFT Gateway. Follow the below steps to enable HTTP service on JSCAPE MFT server:

If you have failover settings defined in the Primary JSCAPE MFT server then it will automatically synchronize with the Failover server and HTTP services would be enabled for the Failover server also.
If failover settings are not defined then you need to enable the HTTP service on both the nodes of the JSCAPE cluster manually.

1. Run the JSCAPE MFT Manager on the Primary JSCAPE server.
2. Go to Server > Settings option. New window will pop-up.(See Figure57)

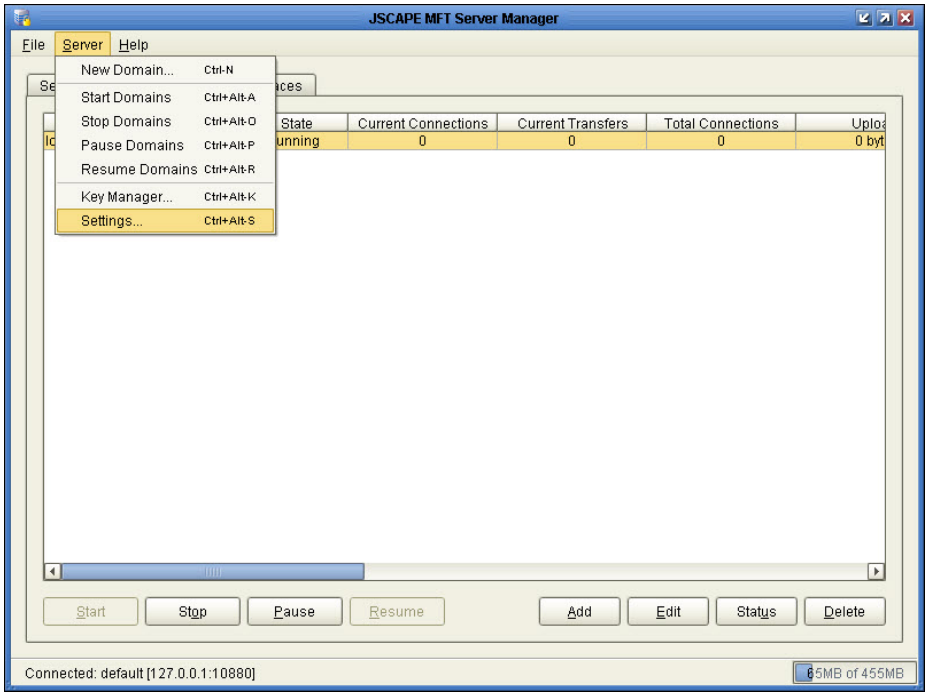


Figure57: JSCAPE MFT Server Manager Screen

3. Now select the “Services” option from the left pane. A new window would pop-up.(See Figure58)

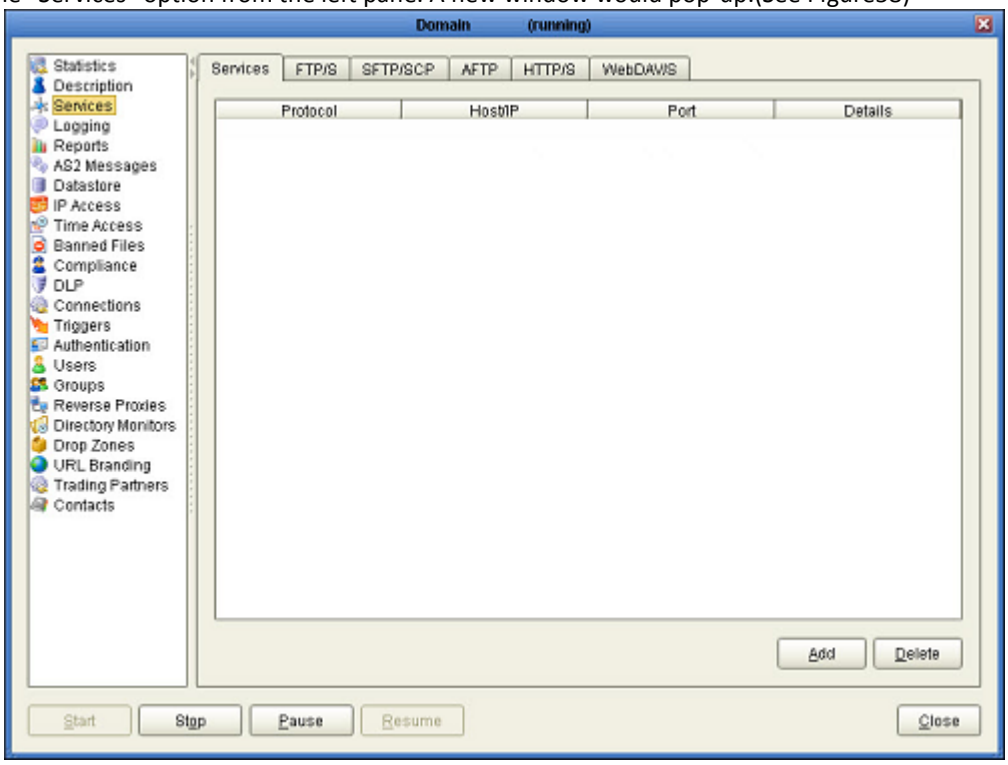


Figure58: Services Screen

4. Click on the ‘Add’ button at bottom to add the new service. A new window would pop-up.(See Figure59)

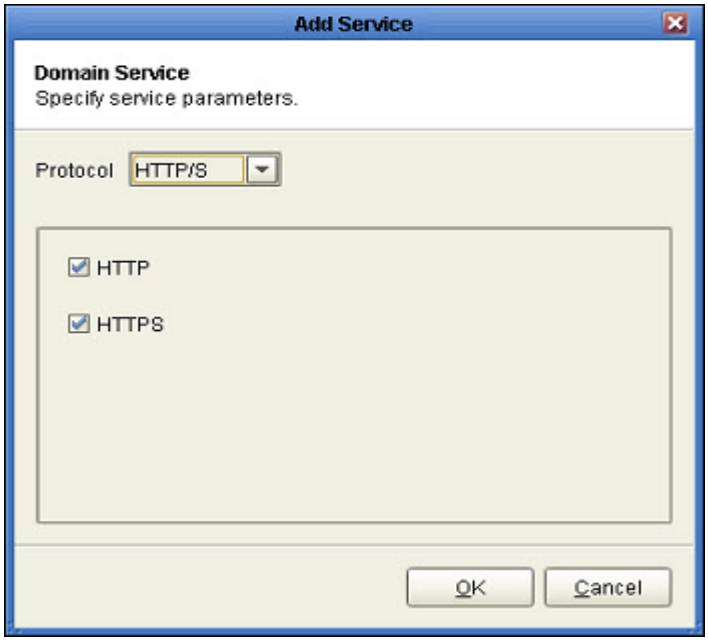


Figure59: Add Service Screen

5. Now select the “HTTP/S” as the protocol and click OK to add HTTP service.
6. Now you can receive as2 messages routed from JSCAPE Gateway to your server.

SQL QUERY TO LOG DATA INTO LOG TABLE

This section describes how the triggers should be setup in JSCAPE MFT Server so that the logs related to the AS2 data transfer are stored in the database with the help of provided SQL Queries.

Pre-requisite

- JSCAPE server version 9.0.2.112 is installed and running.
- You should have the access credentials for the Adeptia Log database and the AU_AS2Logs table created in the Log database.
- You should have all the SQL queries for AS2 log insertion.

Inserting logs for File Uploaded through AS2 on JSCAPE Server

To get the logs inserted into the Log Database we need to create a single trigger in JSCAPE with multiple trigger actions defined in the a certain order that is defined in the steps below:

1. Create a Trigger in JSCAPE Server with “File Upload” selected as the Event Type.
2. Configure the Trigger Condition and then proceed to define the Trigger Action.
3. First add the trigger action “Rename File” to append the time-stamp to the incoming file.

> *For adding the Time-stamp to the incoming file use following values for the Rename File trigger action parameters:*
> ***File**: %LocalPath%*
> ***DestinationFile:** %LocalDir%/%Month%-%DayOfMonth%-%Year%_%Hour%-%Minute%-%Second%-%Millisecond%_%Name%*

4. After that add the “SQL Query” trigger action in the same Trigger. This SQL Query action will log the information of the incoming file to the Log Database of the Adeptia.

SQL Query Action parameters:
Jdbc url: *Provide the jdbc URL of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action:

*INSERT INTO AU_AS2LOG(AU_FILE_SIZE, AU_CLIENT_HOST, AU_CLIENT_PORT, AU_DOMAIN_NAME, AU_LOCAL_DIR, AU_FILE_NAME, AU_SESSION_ID, AU_STATUS, AU_ORIGINAL_MESSAGEID, AU_TYPE, AU_FILE_MODIFIED_NAME,AU_AS2_FROM,AU_AS2_TO,AU_TIMESTAMP) VALUES('%Bytes%', '%ClientIP%', '%ClientPort%', '%DomainName%', '%LocalDir%', '%Name%', '%Sessionid%', '%Success%', '%AS2.MessageId%', 'INBOUND', '%Month%-%DayOfMonth%-%Year%_%Hour%-%Minute%-%Second%-%Millisecond%_%Name%', '%AS2.Sender%', '%AS2.Recipient%', unix_timestamp('%Year%-%Month%-%DayOfMonth% %Hour%:%Minute%:%Second%')*1000+%Millisecond%)*

5. After defining all the trigger actions click on OK.(See Figure60)

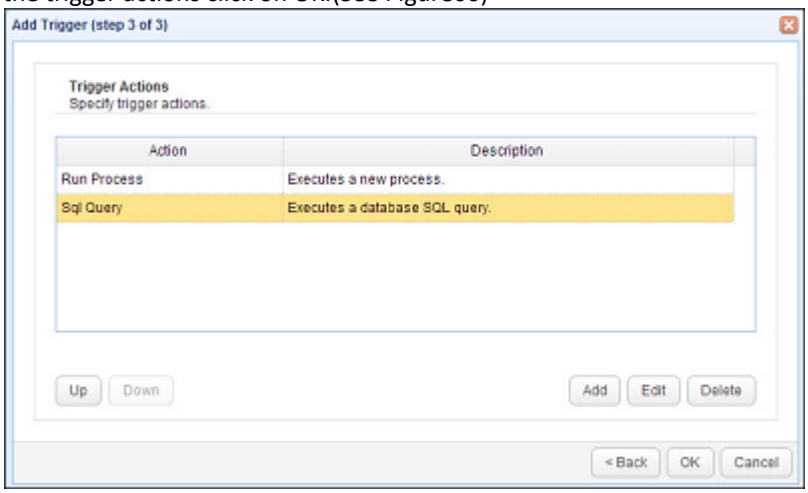


Figure60: File Uploaded Trigger Action Screen

6. Select the newly created Trigger from Trigger manage page and click on “Apply” to make the new changes into effect.

Inserting Logs for the MDN Receipt send on Reception of file

Whenever a file is uploaded to your JSCAPE server it automatically sends a MDN receipt of that file to the trading partner that uploaded the file to your server. To inert the logs of the MDN receipts sent out follow the below steps:

1. Create a trigger in JSCAPE server with Event Type selected as “AS2 Receipt Sent”.(See Figure61)

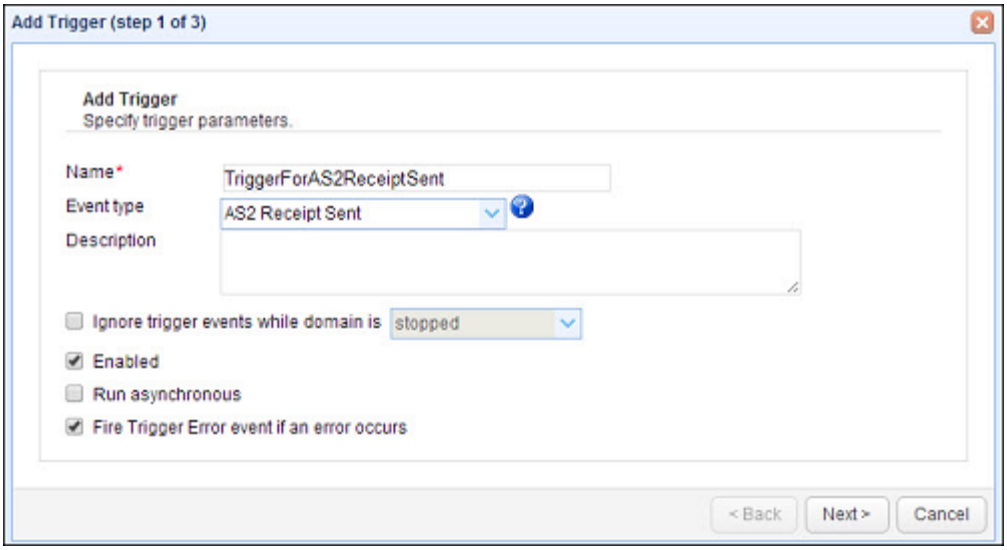


Figure61: Trigger Event Type Screen

2. Configure the Trigger condition and move forward to define the trigger action.
3. Now select the Trigger Action as “SQL Query” and define the SQL Query parameters as below:

SQL Query Action parameters:
Jdbc url: *Provide the jdbc url of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action:

*INSERT INTO AU_AS2LOG(AU_AS2_FROM, AU_AS2_TO, AU_CLIENT_HOST, AU_CLIENT_PORT, AU_DISPOSITION_ACTION, AU_DISPOSITION_SENDING_MODE, AU_DISPOSITION_TYPE, AU_DOMAIN_NAME, AU_ORIGINAL_MESSAGEID, AU_RECEIPT_MESSAGEID, AU_TYPE,AU_TIMESTAMP) VALUES('%As2From%', '%As2To%', '%ClientHost%', '%ClientPort%', '%DispositionActionMode%', '%DispositionSendingMode%', '%DispositionType%', '%DomainName%', '%OriginalMessageId%', '%ReceiptId%', 'RECEIPT SENT', unix_timestamp('%Year%-%Month%-%DayOfMonth% %Hour%:%Minute%:%Second%')*1000+%Millisecond%)*

4. After that click on Ok.
5. Select the newly created Trigger from Trigger manage page and click on “Apply” to make the new changes into effect.

Inserting Logs for the Files sent to the Trading Partner

You can also insert the logs for the files to be sent to your Trading partners by defining a Trigger as described in the below steps:

1. Create a trigger with Event Type selected as “Directory Monitor File Added”.
2. Define Trigger conditions and proceed to trigger action.
3. First define a trigger action as “SQL Query” to log the information about the file to be sent to the trading partner. Provide the parameters as follows for the action.

SQL Query Action parameters:
Jdbc url: *Provide the jdbc URL of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action*:*

*INSERT INTO AU_AS2LOG(AU_LOCAL_DIR, AU_DOMAIN_NAME, AU_FILE_NAME, AU_FILE_SIZE, AU_FILE_MODIFICATION_TIME, AU_TIMESTAMP, AU_TYPE, AU_STATUS) values('%Directory%', '%DomainName%', '%Name%', '%FileLength%', '%FileModificationTime%', unix_timestamp('%Year%-%Month%-%DayOfMonth% %Hour%:%Minute%:%Second%')*1000+%Millisecond%, 'OUTBOUND', 'Ready to send')*

4. After that add a new trigger action as "Trading Partner Regex file Upload" to send files to your trading partner. Refer to the document to create the Trading partner regex File upload action.
5. After that again add a new "SQL Query" trigger action to log the status of the file send to the Trading partner into the Log database.

SQL Query Action parameters:
Jdbc url: *Provide the jdbc url of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action:

UPDATE AU_AS2LOG SET AU_STATUS='SENT' WHERE AU_FILE_NAME='%Name%'

6. After that click on Ok.
7. Select the newly created Trigger from Trigger manage page and click on "Apply" to make the new changes into effect.

Inserting Logs for the MDN Receipt received on Sending a File

You can log the MDN Receipt details into the log database for all the files sent to the trading partners through AS2 protocol. Follow below steps to log MDN receipt details:

1. Create a trigger with Event Type selected as "AS2 Receipt Received".(See Figure62)

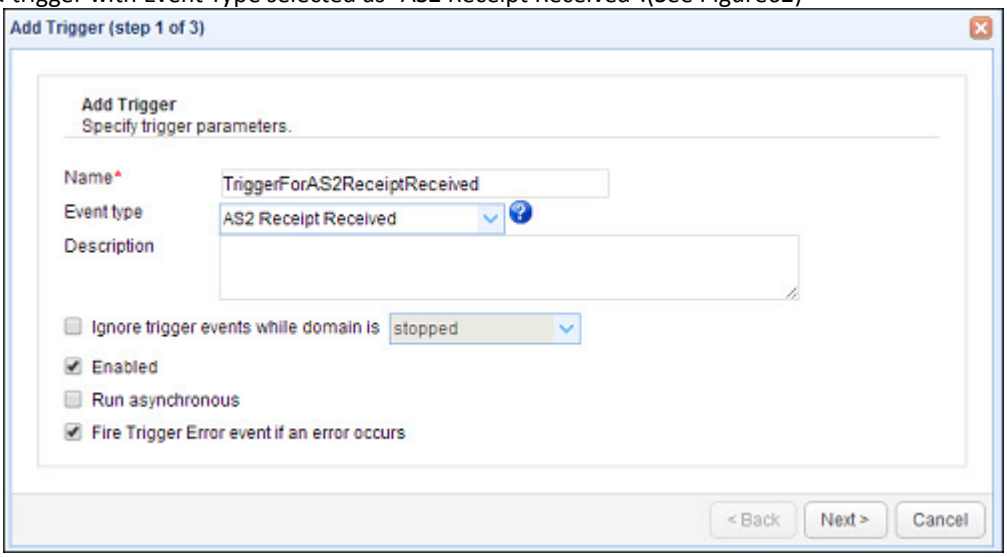


Figure62: Trigger Event type Screen

2. Define Trigger conditions and proceed to trigger action.
3. Define the Trigger action as "SQL Query" and configure the parameters as defined below:

SQL Query Action parameters:
Jdbc url: *Provide the jdbc URL of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action:

*INSERT INTO AU_AS2LOG(AU_AS2_FROM, AU_AS2_TO, AU_CLIENT_HOST, AU_CLIENT_PORT, AU_DISPOSITION_ACTION, AU_DISPOSITION_SENDING_MODE, AU_DISPOSITION_TYPE, AU_DOMAIN_NAME, AU_ORIGINAL_MESSAGEID, AU_RECEIPT_MESSAGEID, AU_TYPE, AU_TIMESTAMP) VALUES('%As2From%', '%As2To%', '%ClientHost%', '%ClientPort%', '%DispositionActionMode%', '%DispositionSendingMode%', '%DispositionType%', '%DomainName%', '%OriginalMessageId%', '%ReceiptId%', 'RECEIPT RECEIVED', unix_timestamp('%Year%-%Month%-%DayOfMonth% %Hour%:%Minute%:%Second%')*1000+%Millisecond%)*

4. After that click on Ok.
5. Select the newly created Trigger from Trigger manage page and click on “Apply” to make the new changes into effect.

Defining a Misfire handling Trigger

You can create a trigger in JSCAPE server that can handle if any of the events misfires or through some exception. It can also be used to log the information of the files send to the partner that failed due to some exception. Follow the below steps to configure a misfire handing event:

1. Run the JSCAPE application server manager.
2. Go to “Domains” tab and select the domain.
3. After selecting the domain click on the “Edit” button at the bottom.
4. Select the “Triggers” option from the left pane.
5. Create a new trigger with Event type selected as “TriggerErrorEvent”.(See Figure63)

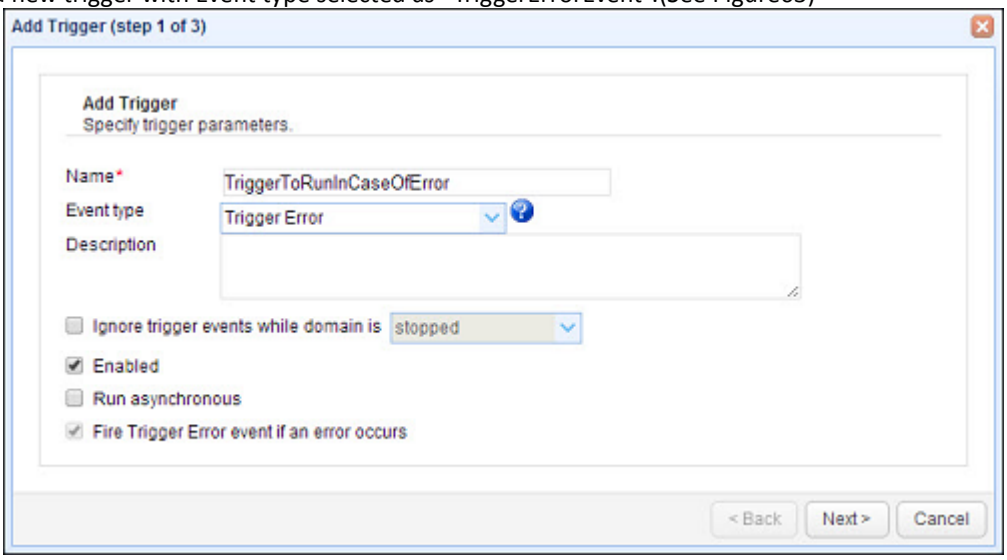


Figure63: Trigger Event Type Screen

6. Define the trigger condition and proceed to define trigger action.
7. Add a trigger action as “SQL Query” and configure the parameters as defined below.

SQL Query Action parameters:
Jdbc url: *Provide the jdbc url of the Adeptia Log Database*
Username: *Username of the Adeptia Log Database*
Password: *Password for the Adeptia Log database*
Use the following QUERY in the SQL Query trigger action:

UPDATE AU_AS2LOG SET AU_ERROR_MESSAGE='%ActionMessage%', AU_STATUS='ERROR' WHERE AU_FILE_NAME='%TriggerErrorMessage%'

8. After that click on Ok.
9. Select the newly created Trigger from Trigger manage page and click on “Apply” to make the new changes into effect.

CONFIGURING JSCAPE SERVICE

You may need to have files dropped and picked from network or shared drives while sending/receiving files from JSCAPE server. By default, JSCAPE server’s windows service is created with ‘Local System’ account which has limited permission sets and does not allow JSCAPE to interact with shared drives. You need to explicitly configure this setting.

Steps to configure JSCAPE Windows service

Follow the below steps to configure JSCAPE services:

1. Go to the Start Menu of the Windows and select the run service.
2. Type in services.msc in the run and click on go.
3. Locate the JSCAPE services in the services window and right click on it to select properties. (See Figure 64)

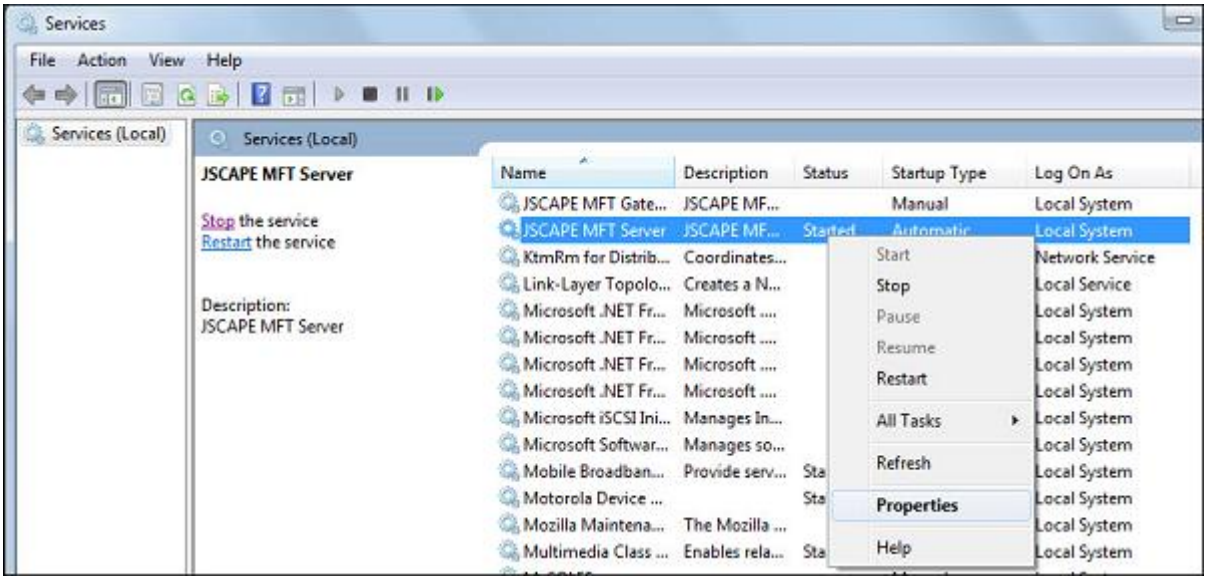


Figure 64: JSCAPE MFT server services

4. Go to the “Log On” as tab in the properties window and select the “This account” option and provide the Account name and password for an administrator account in the Windows.(See Figure65)

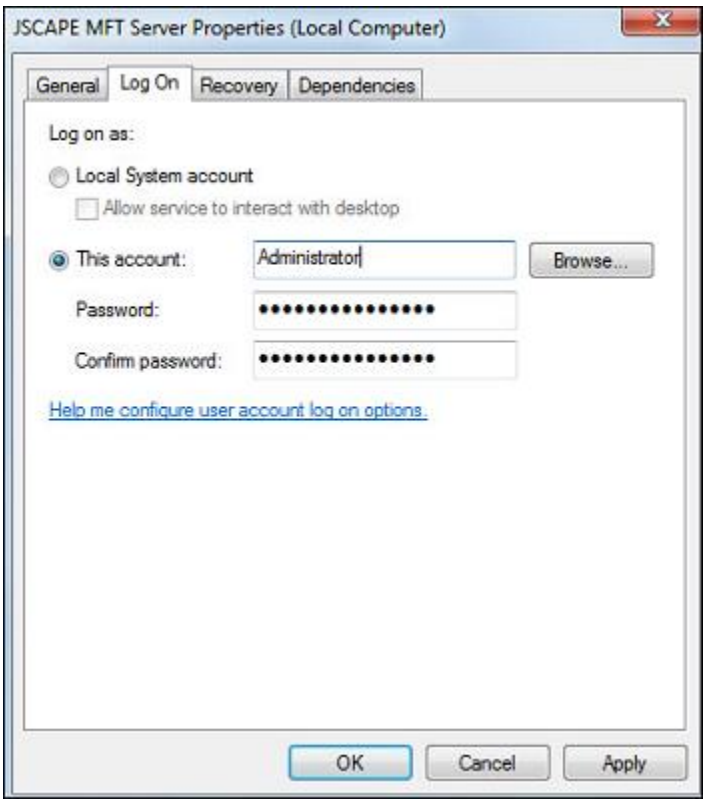


Figure65: Properties Pane

5. Click on “Apply” and then on Ok to apply the changes.
6. To apply the changes you need to restart the JSCAPE services.

RUNNING BATCH SCRIPT TO RENAME FILE INCOMING FILE IN JSCAPE

Adeptia provides a java utility to append the file with sender ID and the time stamp for generating unique files. The utility is provided as a zip file which can be extracted. The extracted zip contains the batch file which can be executed to rename the incoming file name.

Steps to run the utility

Follow the below steps to run the utility to rename the incoming files in JSCAPE:

1. Extract the utility zip folder.
2. Place the extracted folder in the JSCAPE default installation directory.
3. Go to JSCAPE web Interface > Domains > Triggers and create a trigger with “File Upload” as criteria.
4. Select the Run Process Action for the Trigger action.
5. Provide the name and absolute path of the batch file located in the extracted folder placed in the JSCAPE default installation directory.
6. This batch requires two arguments as input. Provide the arguments separated by space in the “Arguments” field of the Trigger action. First argument will be - %LocalPath% this is a variable that holds the filename along with its complete path. Second argument is the target location where the file would be placed upon renaming.
7. Provide the location for the Output stream generated by the Batch file at any desired location in the “Output Stream” field.
8. Provide the location for the Error stream generated by the Batch file at any desired location in the “Error Stream” field.
9. Click on Ok.

10. Then Click on “Apply” to apply the changes in the trigger.