# Hermes 2 Administration Tool User Guide

Version 0.2

19/02/2010

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Produced by the Center for E-Commerce Infrastructure Development The University of Hong Kong

Hermes 2 Administration Tool User Guide	Version 0.2
	2/19/2010

# 1. Status of This Document

### 1.1. Version History

Ver. No.	Date	Revised By	Description	Filename
0.1	29 May 2007	Twinsen Tsang	Style updated for new H2O Release From old document.	Hermes 2 Administration Tool User Guide.doc
0.2	26 Aug 2008	Jumbo Cheung	Added paragraphs to explain the "retry" button.	Hermes 2 Administration Tool User Guide.doc

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## 4. Introduction

Hermes 2 is a multi-protocol B2B messaging system. Its extensible architecture allows different B2B messaging protocols to be supported through deployment of different plugins.

#### **4.1.** Purpose of This Document

The purpose of this document is to describe the steps for configuring Hermes 2 using its administration console.

In this release, Hermes 2 supports two protocols – AS2 and ebXML Messaging Service. Since Hermes 2 implements a flexible plugin mechanism to support different B2B messaging protocols, there are two main kinds of configuration tasks described in this document.

First, this document will cover the configuration steps to manage plugins. Second, this document will cover the configuration steps to manage the administrative parameters of each of the two protocols supported.

#### 4.2. Intended Audience

The intended audience of this document includes the operators who handle the configuration and routine maintenance of the Hermes 2 system. Also, the application developers will find this document useful to configure their Hermes 2 system for development of B2B applications.

#### 4.3. Scope of the Document

The scope of this document includes the following:

- 1. configuration steps to manage plugins and the Java Runtime Environment (JRE)
- 2. configuration steps to manage the AS2 sub system and the related B2B partnership information
- 3. configuration steps to manage the ebXML Messaging Service sub system and the related B2B partnership information

#### 4.4. Prerequisite

The users should have the Hermes 2 system installed successfully. The steps for installing the system can be found at the Hermes 2 GPL Edition Installation Guide.

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The users should use a web browser to access the Hermes 2 administration console.

## 5. Getting Started

#### 5.1. User Login

The Hermes 2 administration console is a Web based system. The user can access the administration console using a web browser. Typically the URL of the administration console is:

http://<installation server host>:<installation port>/corvus/admin/home

The Hermes 2 administration console employs container managed authentication to make sure only authorized users can access the console. It requires an authenticated user with the role "admin" to access. By default, Tomcat stores the user and role information at the "CATALINA\_BASE/conf/tomcat-users.xml" file.

When the URL of the administration console is accessed, the browser will prompt up a window (Figure 1) for the user to enter his user name and password.

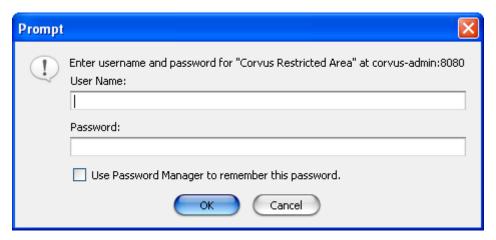


Figure 1. Login window

#### 5.2. Main Screen

After authentication, the browser will be loaded with the main screen of the administration console (Figure 2).

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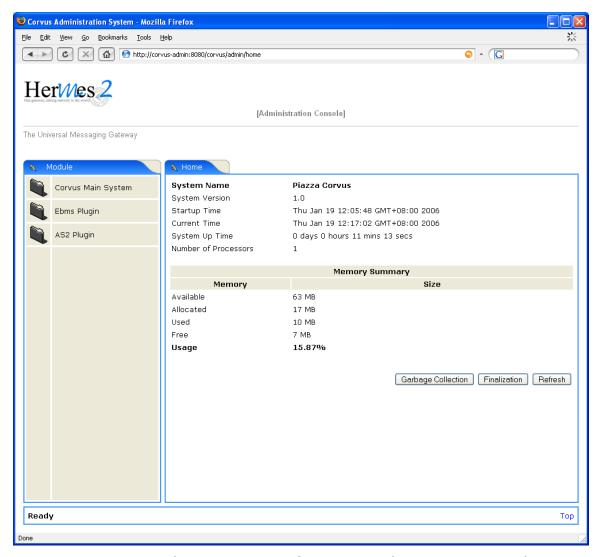


Figure 2. The main screen of Hermes 2 administration console

A Hermes 2 logo will be shown on the top-left corner of every page of the administration console. It is linked to the main screen of the console.

The main screen shows the brief information about the running Hermes 2 system. It shows the version number, the system startup time of the running system. It also shows the memory summary of the system.

From the main screen, the user can trigger the Java Runtime Environment to perform garbage collection. Upon clicking on the "Garbage Collection" button, a window (Figure 3) will be shown to prompt the user for confirmation.

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Figure 3. Confirmation window to run garbage collection

The user can also trigger the **object finalization** in the Java Runtime Environment. Upon clicking on the "Finalization" button, a window (Figure 4) will be shown to prompt the user for confirmation.

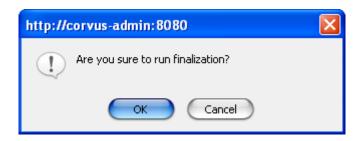


Figure 4. Confirmation window to run finalization

#### 5.3. Corvus Main System Administration

The Corvus main system handles the plugins in the running system. It also manages the runtime property values of the Hermes 2 system as well as the Java Runtime Environment.

When the user clicks on the link of Corvus Main System in the menu at left hand side, the administration console will show the pages inside the Corvus Main System in the content area at the right hand side.

There are five administration pages in the Corvus Main System.

#### 5.3.1. HTTP Dispatcher

There are five administration pages in the Corvus Main System, the first one will be shown by default. It is the page showing all the HTTP dispatcher currently configured in the Hermes 2 running system (Figure 5**Error! Reference source not found.**).

This is a summary page which displays the current status, the number of current active threads, etc. information. The users can also find the listing of all request listeners currently deployed.

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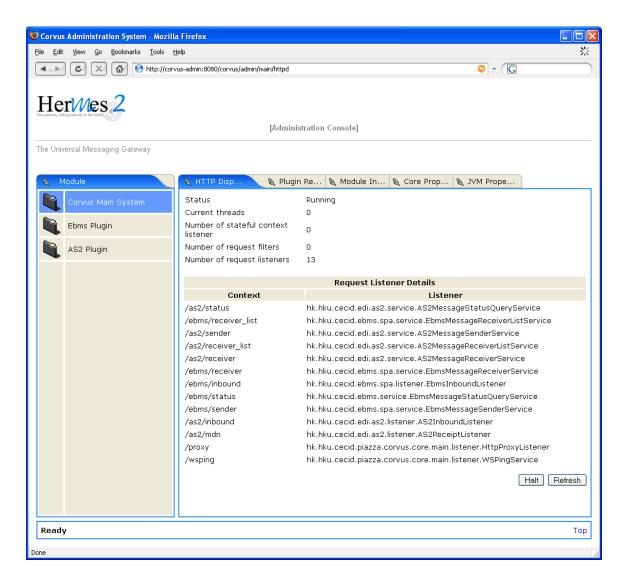


Figure 5. The screen showing all HTTP dispatchers of the Hermes 2 system

From this page, the user can click on the "**Halt**" button to bring down the HTTP handler of Hermes 2 system. Upon clicking the button, a window (Figure 6) will be shown to prompt the user for confirmation.



Figure 6. Confirmation window to halt the Hermes 2 dispatcher

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The user can also click on the "**Refresh**" button to refresh the information shown.

#### 5.3.2. Plugin Registry

When the user clicks on the tab "**Plugin Re...**" at the top part of the content area at the right hand side, the screen displaying all the plugins currently deployed at the Hermes 2 system and their relevant information, will be shown (Figure 7).

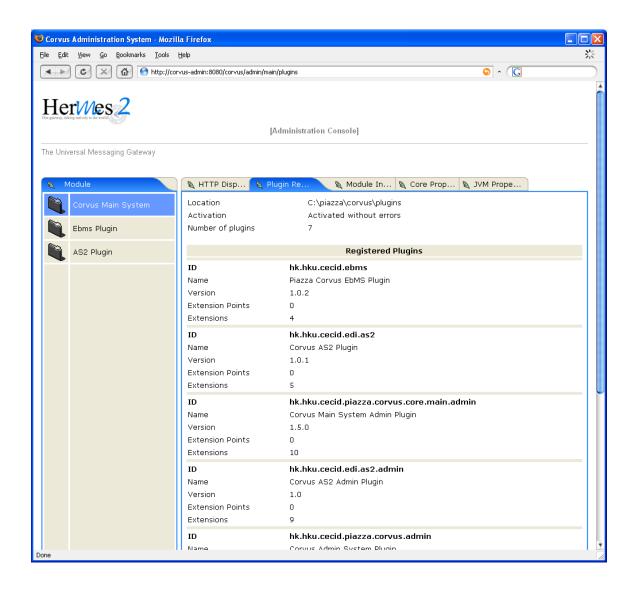


Figure 7. The screen showing all the plugins currently deployed at the Hermes 2 system

#### 5.3.3. Module Information

When the user clicks on the tab "**Module In...**" at the top part of the content area at the right hand side, the screen displaying the module group information will be shown (Figure 8).

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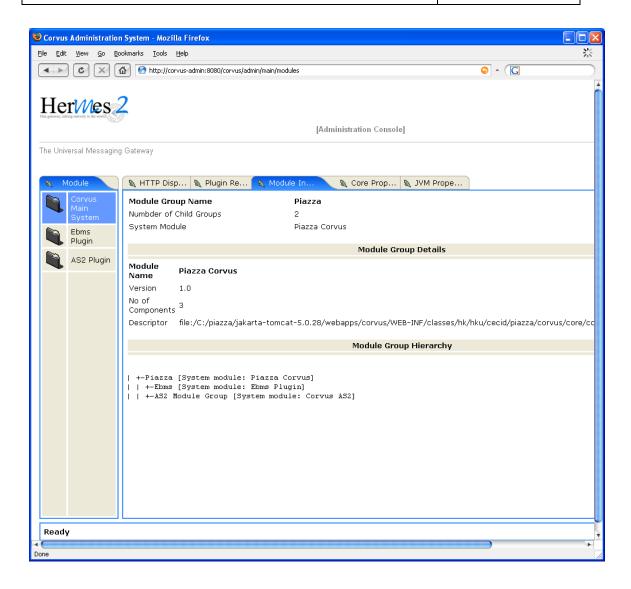


Figure 8. The screen showing summary of module group and dependencies in the Hermes 2 system

#### 5.3.4. Core Properties

When the user clicks on the tab "**Core Prop...**" at the top part of the content area at the right hand side, the screen for editing the core system properties will be shown (Figure 9).

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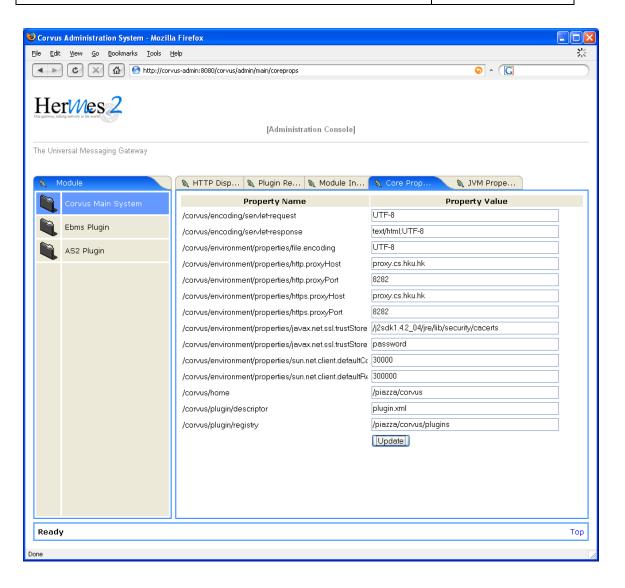


Figure 9. The screen for showing and editing the core property values of Hermes 2 system

The user can enter new property values in the text boxes of the page. To commit the change, the users can click on the "**Update**" button. Upon clicking, a window (Figure 10) will be shown to prompt the users for confirmation.



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Figure 10. Confirmation window for updating the core property values of Hermes 2 system

#### 5.3.5. JVM Properties

When the user clicks on the tab "**JVM Prope...**" at the top part of the content area at the right hand side, the screen for editing the JVM properties will be shown (Figure 11).

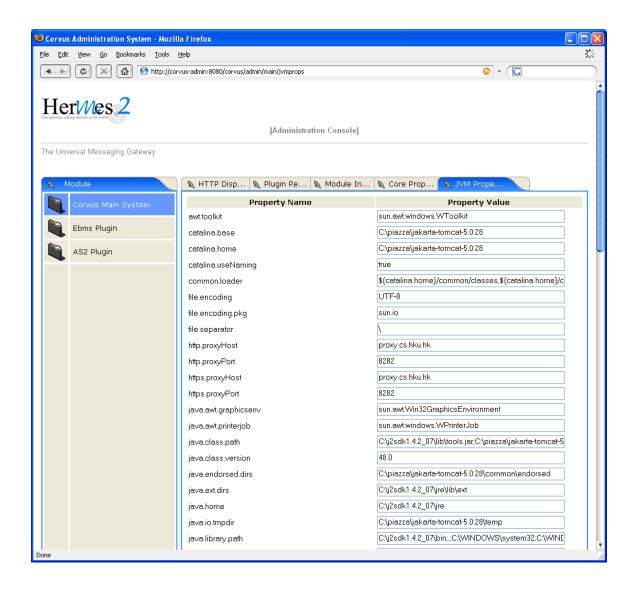


Figure 11. The screen for showing and editing the JVM property values of Hermes 2 system

The user can enter new property values in the text boxes of the page. To commit the change, the users can click on the "**Update**" button. Upon clicking, a window (Figure 12) will be shown to prompt the users for confirmation.

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Figure 12. Confirmation window for updating the JVM property values of Hermes 2 system

#### 5.4. ebXML Messaging Services Plugin Administration

The ebXML Messaging Services plugin handles the messages send to and receive from the B2B partners using ebXML messaging services protocol. In the admin console, the users can query the history of the messages processed by the plugin. The users can also manage the partnership information about the B2B partners.

When the user clicks on the link of Ebms Plugin in the menu at left hand side, the administration console will show the pages for administration of the plugin in the content area at the right hand side.

There are two administration pages for the ebXML Messaging Services Plugin.

#### 5.4.1. Message History

When the user clicks on the tab "**Message H...**" at the top part of the content area at the right hand side, the screen for querying message history will be shown (Figure 13).

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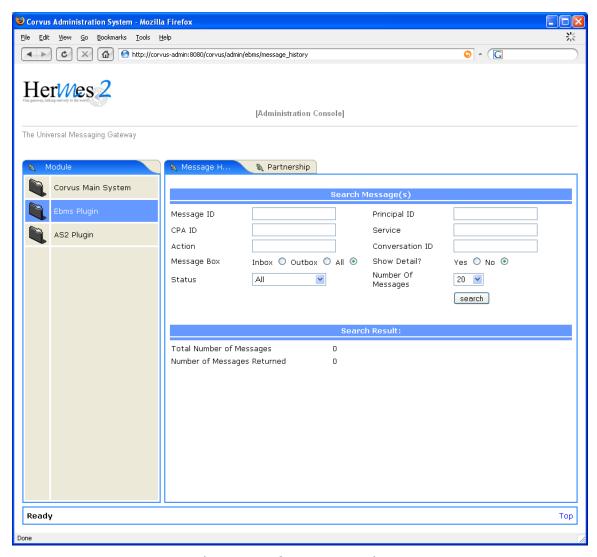


Figure 13. The screen for querying the message status

In the right hand side, the user can enter one or more query parameters to narrow down the search result. In the case that the text box is left blank, the system will not filter the result on that parameter.

The user can also choose how many message to show in one page. The query will be trigger by clicking the "**search**" button. Then, the result will be shown at the lower part of the content area (Figure 14).

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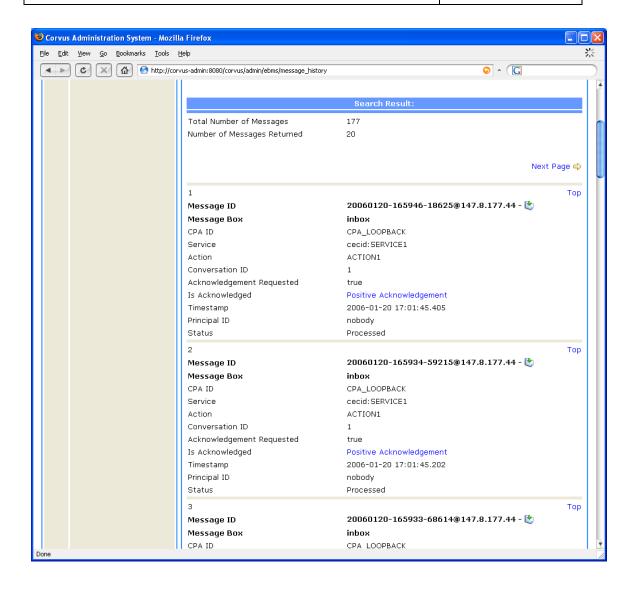


Figure 14. The screen showing the query result of message status

In the result, the messages matching the query parameters are listed one by one. The user can click on link to see the acknowledgment message of a particular message (Figure 15).

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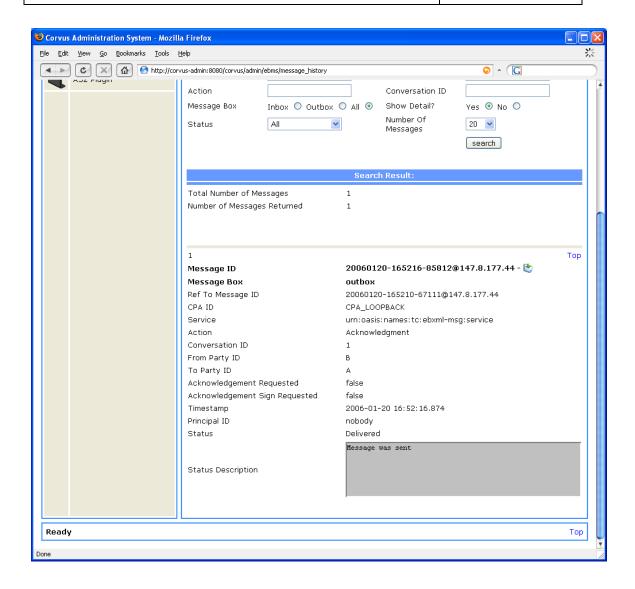


Figure 15. The screen showing the acknowledgment of a particular message

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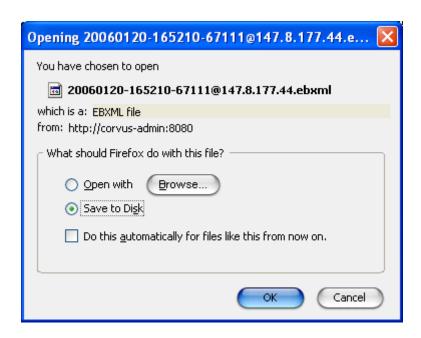


Figure 16. The screen for downloading the message body

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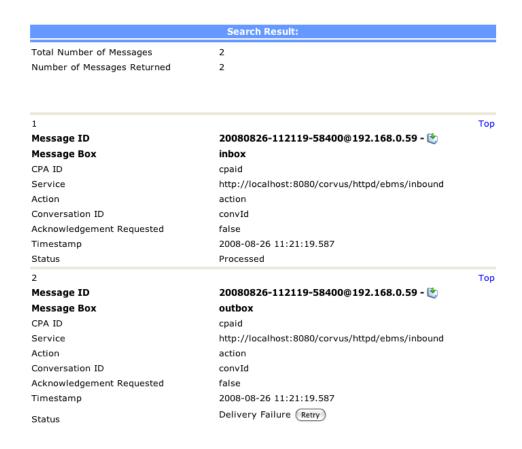
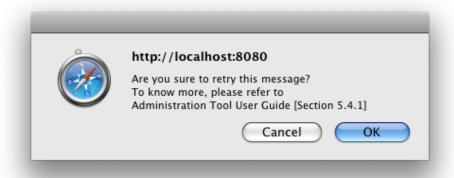


Figure 17. The screen for showing an failed message delivery

User can click the button to re-send the message if the status of the message is shown **Delivery Failure**.

Be reminded, if the recipient has received this message already, the retry action would probably fail. It is because the record still persists in recipient's database/repository. Hence, the **Retry** function would be the best solution if delivery failure was caused by connection problem.



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Figure 18. The screen of Retry Confirmation Windows

#### 5.4.2. Partnership

When the user clicks on the tab "**Partnership**" at the top part of the content area at the right hand side, the screen for managing partnership information will be shown (Figure 17).

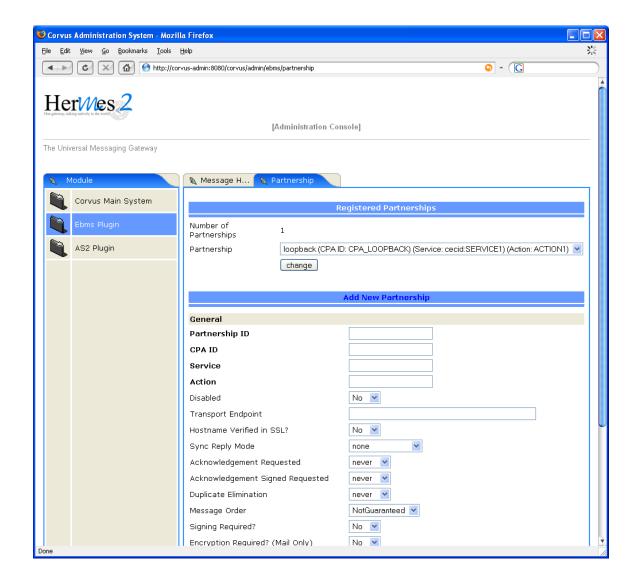


Figure 19. The screen for managing the partnership information

There is a drop down list showing the registered partnerships in the system. To change an existing partnership, the users can select that partnership to be changed at the drop down list, and then click on the "**change**" button. Then the page will be loaded with that partnership for editing (Figure 18).

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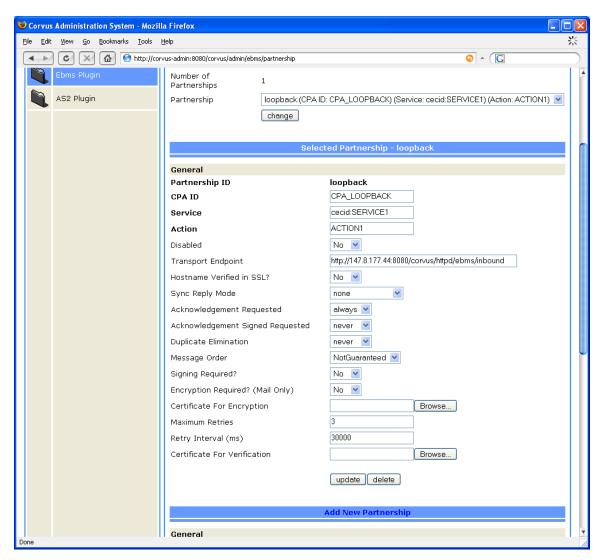


Figure 20. The screen for editing existing partnership information

The users can update the partnership information. Then, they can click on the "**update**" button to commit the change. Upon clicking the button, a window (Figure 19) will be shown to prompt the user for confirmation.



Figure 21. Confirmation window to update the partnership

If the user has confirmed the changes, but there are some unacceptable values by the system. The system will show up a message at the bottom part of the window to inform the user (Figure 20).

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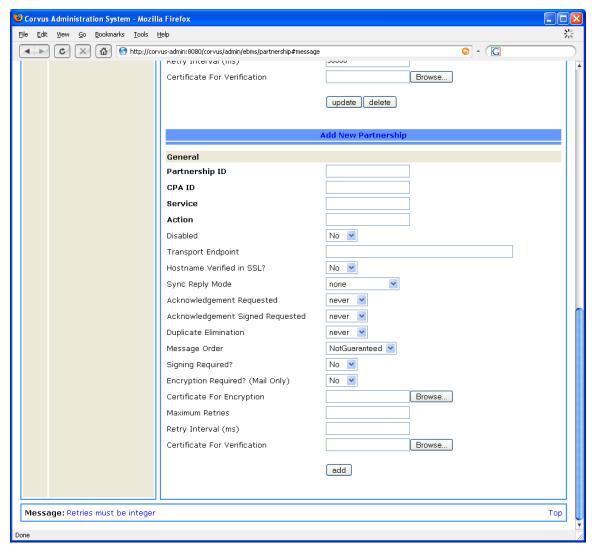


Figure 22. The screen showing the system message when there is wrong information input when editing partnership information

The users can also click on the "**delete**" button to delete the partnership. Upon clicking the button, a window (Figure 21) will be shown to prompt the user for confirmation.



Figure 23. Confirmation window to delete the partnership

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At the lower part of the form, the users can find a section to add a new partnership (Figure 22).

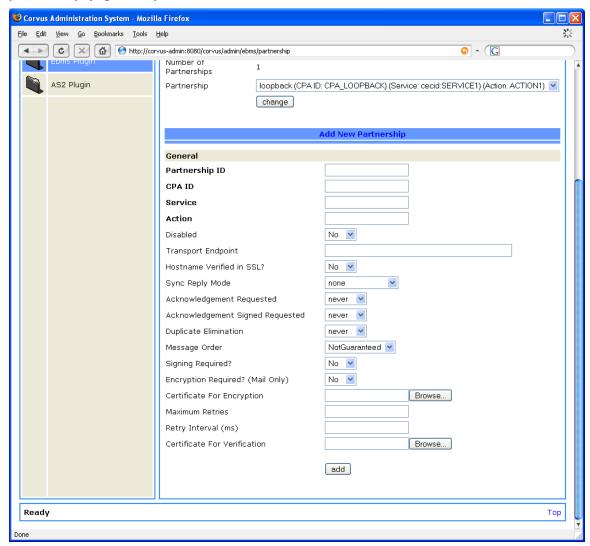


Figure 24. The screen for adding new partnership information

The users can fill in the parameters, and then click the "**add**" button to commit the change. Upon clicking the button, a window (Figure 23) will be shown to prompt the user for confirmation.



Figure 25. Confirmation window to add the partnership

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If the user has confirmed the action, but there are some unacceptable values by the system. The system will show up a message at the bottom part of the window to inform the user (Figure 24).

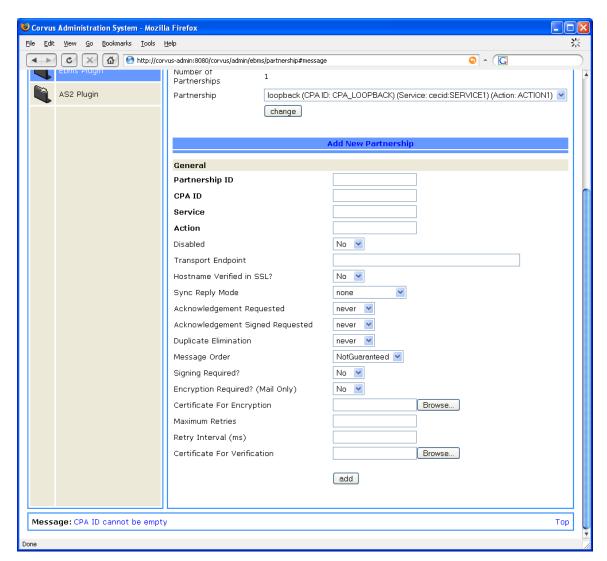


Figure 26. The screen showing the system message when there is wrong information input when adding partnership information

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#### 5.5. AS2 Plugin Administration

The AS2 plugin handles the messages send to and receive from the B2B partners using AS2 protocol. In the admin console, the users can query the history of the messages processed by the plugin. The users can also manage the partnership information about the B2B partners.

When the user clicks on the link of AS2 Plugin in the menu at left hand side, the administration console will show the pages for administration of the plugin in the content area at the right hand side.

There are two administration pages for the AS2 Plugin.

#### 5.5.1. Message History

When the user clicks on the tab "**Message H...**" at the top part of the content area at the right hand side, the screen for querying message history will be shown (Figure 25).

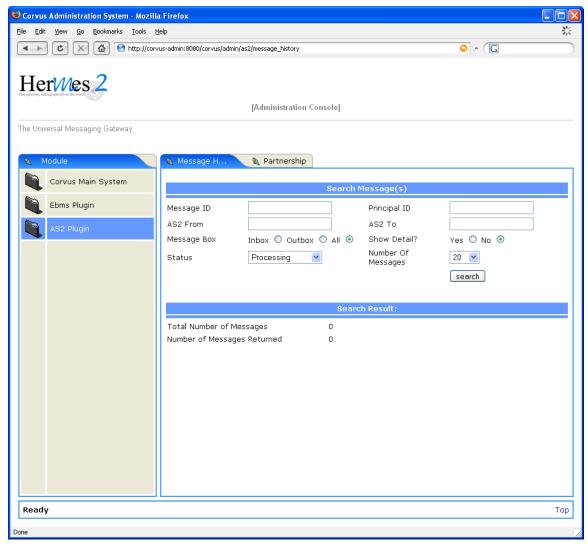


Figure 27. The screen for querying the message status

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In the right hand side, the user can enter one or more query parameters to narrow down the search result. In the case that the text box is left blank, the system will not filter the result on that parameter.

The user can also choose how many message to show in one page. The query will be trigger by clicking the "**search**" button. Then, the result will be shown at the lower part of the content area (Figure 26).

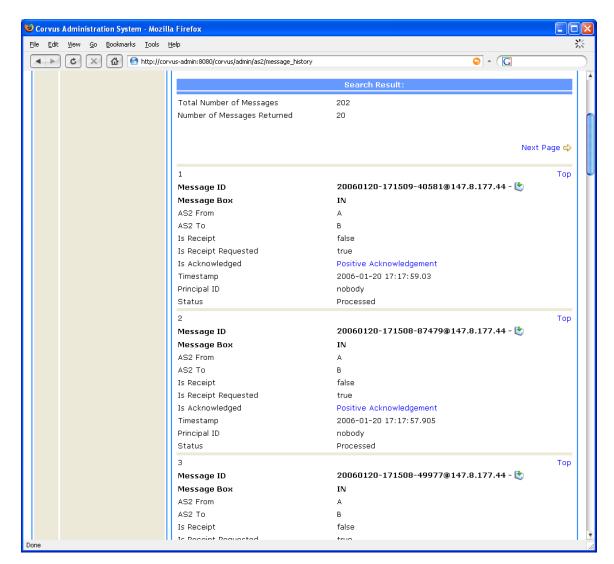


Figure 28. The screen showing the query result of message status

In the result, the messages matching the query parameters are listed one by one. The user can click on link to see the acknowledgment message of a particular message (Figure 27).

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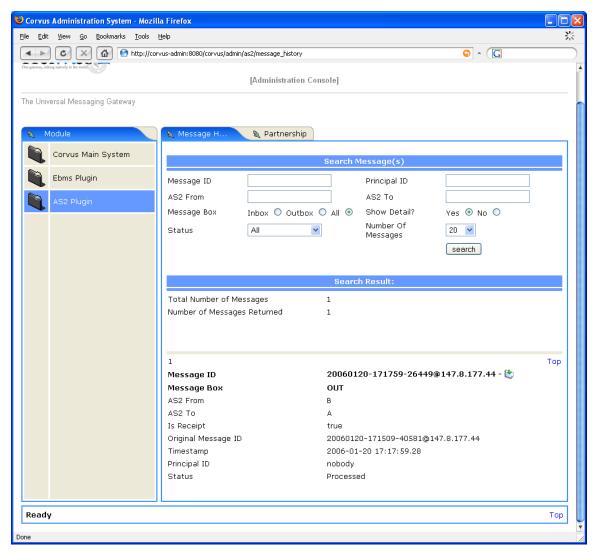


Figure 29. The screen showing the acknowledgment of a particular message

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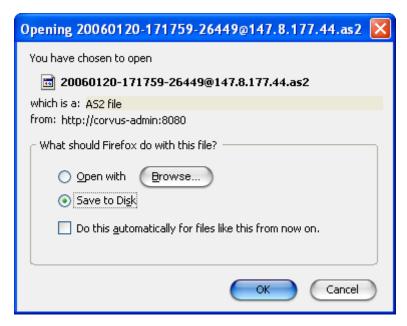


Figure 30. The screen for downloading the message body

	Search Result:	
Total Number of Messages	2	
Number of Messages Returned	2	
1		Тор
Message ID	20080826-114954-69800@192.168.0.59 - 🔮	
Message Box	IN	
AS2 From	as2loopback	
AS2 To	as2loopback	
Is Receipt	false	
Is Receipt Requested	false	
Timestamp	2008-08-26 11:49:54.918	
Status	Processed	
2		Тор
Message ID	20080826-114954-69800@192.168.0.59 - 🔮	
Message Box	OUT	
AS2 From	as2loopback	
AS2 To	as2loopback	
Is Receipt	false	
Is Receipt Requested	false	
Timestamp	2008-08-26 11:49:54.813	
Status	Delivery Failure (Retry)	

Figure 31. The screen for showing an failed message delivery

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User can click the button to re-send the message if the status of the message is shown **Delivery Failure**.

Be reminded, if the recipient has received this message already, the retry action would probably fail. It is because the record still persists in recipient's database/repository. Hence, the **Retry** function would be the best solution if delivery failure was caused by connection problem.

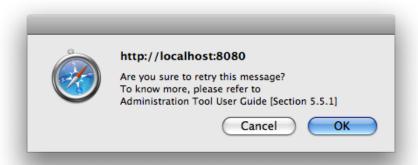


Figure 32. The screen for Retry Confirmation Windows

#### 5.5.2. Partnership

When the user clicks on the tab "Partnership" at the top part of the content area at the right hand side, the screen for managing partnership information will be shown (Figure 29).

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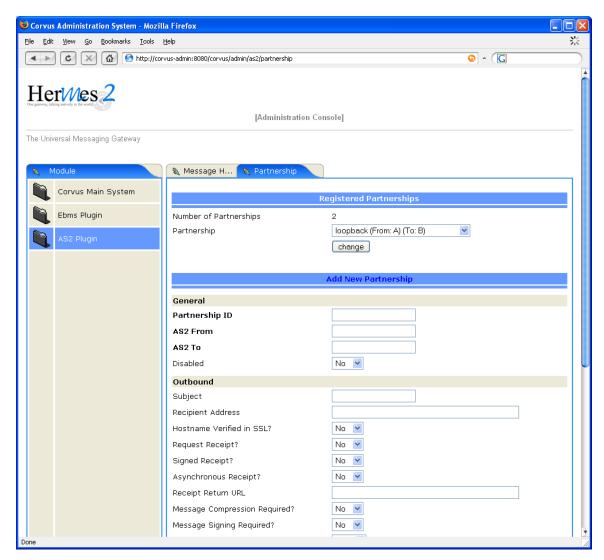


Figure 33. The screen for managing the partnership information

There is a drop down list showing the registered partnerships in the system. To change an existing partnership, the users can select that partnership to be changed at the drop down list, and then click on the "change" button. Then the page will be loaded with that partnership for editing (Figure 30).

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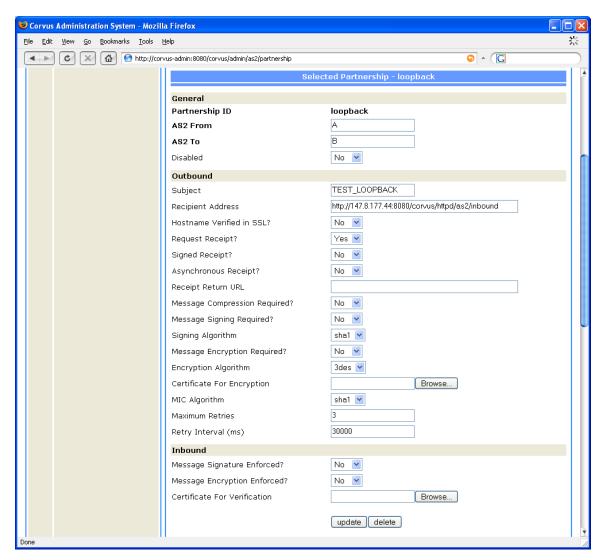


Figure 34. The screen for editing existing partnership information

The users can update the partnership information. Then, they can click on the "**update**" button to commit the change. Upon clicking the button, a window (Figure 31) will be shown to prompt the user for confirmation.



Figure 35. Confirmation window to update the partnership

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If the user has confirmed the changes, but there are some unacceptable values by the system. The system will show up a message at the bottom part of the window to inform the user (Figure 32).

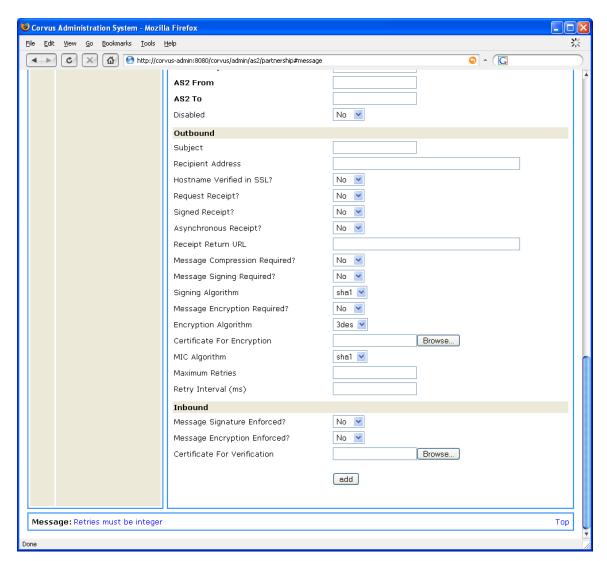


Figure 36. The screen showing the system message when there is wrong information input when editing partnership information

The users can also click on the "**delete**" button to delete the partnership. Upon clicking the button, a window (Figure 33) will be shown to prompt the user for confirmation.

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Figure 37. Confirmation window to delete the partnership

At the lower part of the form, the users can find a section to add a new partnership (Figure 34).

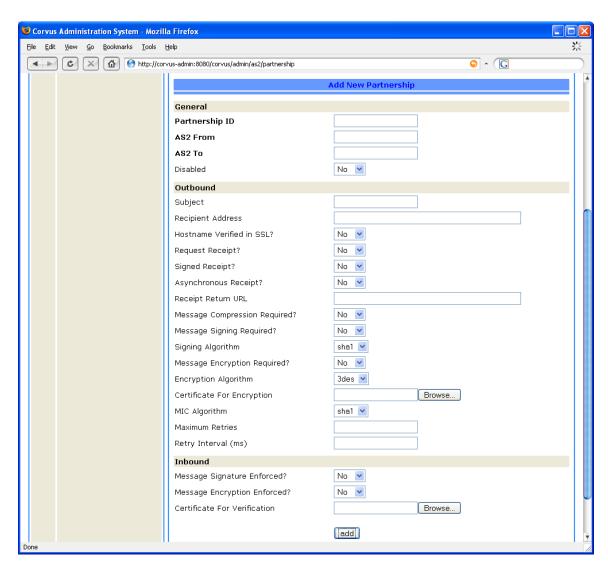


Figure 38. The screen for adding new partnership information

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The users can fill in the parameters, and then click the "**add**" button to commit the change. Upon clicking the button, a window (Figure 35) will be shown to prompt the user for confirmation.



Figure 39. Confirmation window to add the partnership

If the user has confirmed the action, but there are some unacceptable values by the system. The system will show up a message at the bottom part of the window to inform the user (Figure 36).

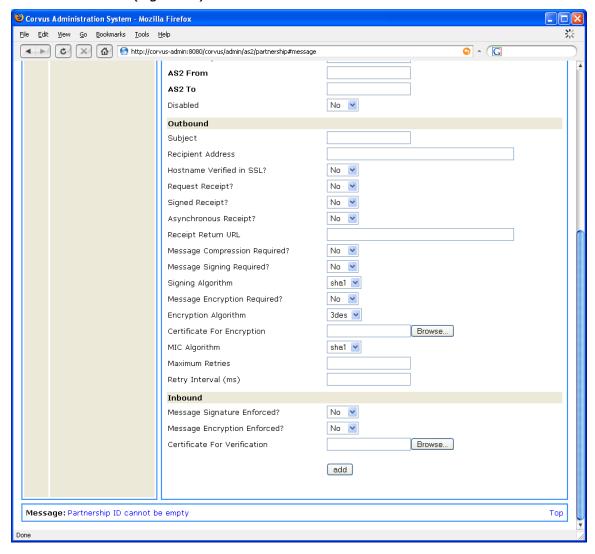


Figure 40. The screen showing the system message when there is wrong information input when adding partnership information

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## 6. References

- Hermes 2 Application Development Guide
- Hermes 2 Installation Guide
- OASIS ebXML Message Service Specification 2.0
  www.oasis-open.org/committees/ebxml-msg/documents/ebMS v2 0.pdf
- MIME-based Secure Peer-to-Peer Business Data Interchange over the Internet Using HTTP AS2 (draft-ietf-ediint-as2-17.txt)

http://www.ietf.org/rfc/rfc4130.txt

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