

impatica for BlackBerry® Enterprise Server

Administrator Manual

Version 2.0.1

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The Java Impatica for BlackBerry Enterprise Server runtime is distributed in Eastridge Technology’s Jshrink format.

This software is based in part on the work of the Independent JPEG Group.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

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1 Introduction

Impatica for BlackBerry Enterprise Server converts Microsoft PowerPoint e-mail attachments into a compact format suitable for viewing on BlackBerry Wireless Handhelds. It consists of two components:

- The *Impatica for BES server software* which runs on a server with or independent of the BlackBerry Enterprise Server, and;
- The *Impatica Attachment Handler* which runs on each BlackBerry on which PowerPoint attachment viewing is desired.

When a BlackBerry handheld user receives notification of an e-mail message with a PowerPoint attachment and chooses *View Attachment*, the Impatica Attachment Handler sends a conversion request to the Impatica for BES server software. The Impatica for BES server software then transforms the PowerPoint presentation into a BlackBerry compatible format and file size and sends the converted presentation to the handheld for playback.

This document describes the installation, operation and administration of the Impatica for BES software.

2 System Requirements

Server Software:

- Pentium 4 or later
- 1 GB of RAM
- Microsoft Windows 2000 or later
- BlackBerry Enterprise Server (BES) 4.0, configured as a Mobile Data Service (MDS) Push Server

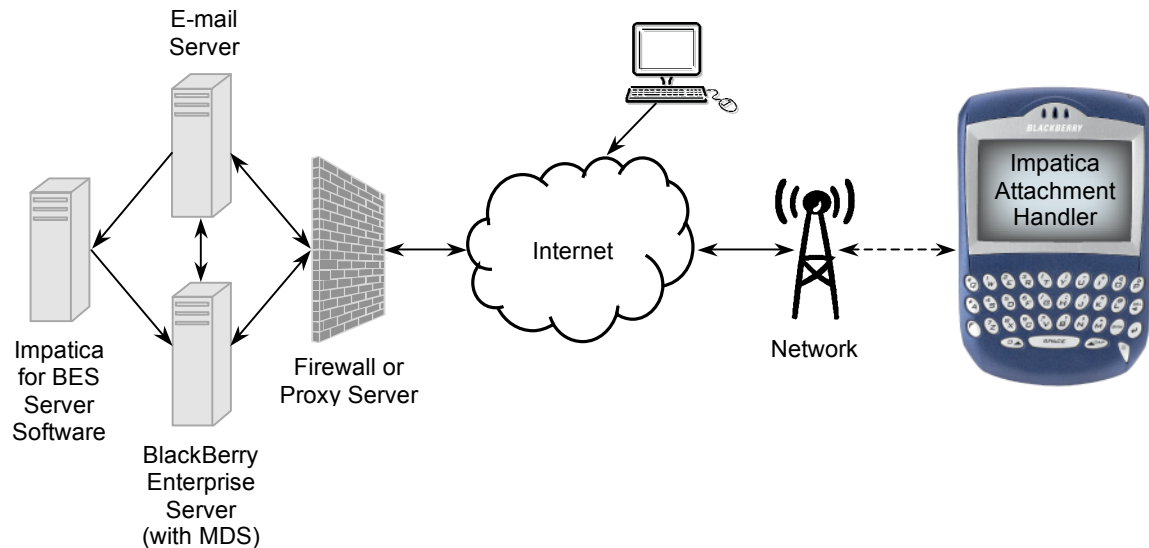
It is highly recommended that the Impatica for BES server software be deployed on a dedicated server. It is, however, possible to install it on the same server as the BES.

Handheld:

- Java-based BlackBerry Handheld
- BlackBerry Software 3.8 or later

3 Overview

3.1 Operational Overview



The process of receiving, converting and playing a PowerPoint e-mail attachment using the Impatica for BES system is as follows:

1. An e-mail message with a PowerPoint attachment is sent via the Internet.
2. The e-mail message, with its PowerPoint attachment, arrives at the enterprise e-mail server.
3. The e-mail message, with a notification of the PowerPoint attachment, is routed through the BlackBerry Enterprise Server to the BlackBerry.
4. The BlackBerry user receives and opens the e-mail message, scrolls and clicks on the PowerPoint attachment notification then chooses *View Attachment*. As a result, the Impatica Attachment Handler automatically sends a conversion request e-mail message to the e-mail address assigned to Impatica for BES.
5. The Impatica for BES Conversion Manager service receives the conversion request e-mail by checking its assigned e-mail address on the e-mail server.
6. Impatica for BES downloads the PowerPoint attachment and converts it to Impatica's format using either the Impatica Converter1 service or the Impatica Converter2 service.
7. Converted presentation content is sent to the BES MDS push server as it is available.

8. The BES MDS push server delivers the converted presentation to the BlackBerry.
9. The Impatica Attachment Handler begins to play the presentation on the BlackBerry as soon as sufficient data has been received.

3.2 Architectural Overview

Impatica for BES is installed within the existing enterprise architecture in order to extend its capabilities, and to maintain the security of the data transmitted.

The Impatica Attachment Handler software must be installed on each BlackBerry handheld on which PowerPoint viewing is desired. This software can easily be deployed by USB, over-the-air automatically through the BES, or over-the-air from a web site.

The Impatica for BES server software receives conversion requests as e-mail messages; therefore, it requires a valid e-mail account that maybe accessed through the e-mail server via IMAP (for Microsoft Exchange, Lotus Domino and Novell GroupWise), OWA (for Microsoft Exchange 2000 or later) or DIIOP (for Lotus Domino).

Once the presentation conversion has begun, the Impatica for BES sends the presentation content to the BlackBerry handheld through the BlackBerry Enterprise Server's MDS push server. Therefore, the BES must be configured as an MDS push server and the Impatica for BES server software must be provided with the necessary information to connect to the MDS push server.

4 Installation

Step 1: Pre-installation Configuration

Impatica for BlackBerry Enterprise Server uses an e-mail address to receive and process attachment viewing requests. This e-mail address must be created and active prior to the installation and configuration of the Impatica for BlackBerry Enterprise Server software. The converted attachments are returned to the BlackBerry handheld for viewing by Mobile Data Service (MDS) push via the BlackBerry Enterprise Server.

As you complete the steps below, please record the following information:

BlackBerry Enterprise Server Information
MDS push server name or IP address:
Web server listen port:
Incoming Mail Information
Select one of the following e-mail protocols and fill in the associated information to be used for receiving conversion requests.
<input type="checkbox"/> IMAP Server name or IP address: Login user name: Password: Alias (if different than user name): Full e-mail address: For Microsoft Exchange 2000 or 2003 Server, Net BIOS name: SSL Enabled:
<input type="checkbox"/> Outlook Web Access (OWA) for Microsoft Exchange 2000 + Server name or IP address: Domain name: OWA request URL (relative path): Login user name: Password: Full e-mail address: SSL Enabled:

DIIOP for Lotus Domino

Server name or IP address:

Login user name:

Password:

Full e-mail address:

Domino DIIOP port:

Domino HTTP port:

1. Define an e-mail account on a mail server for Impatica for BlackBerry Enterprise Server.
2. Record the e-mail settings in the table above.
3. Ensure that the selected e-mail protocol is active and accessible from the server on which Impatica for BlackBerry Enterprise Server will be installed.

Note: The use of DIIOP on Lotus Domino requires that the DIIOP Server Task be running. For Lotus Domino 5 servers, the HTTP task must also be started.

4. Verify the functionality of the e-mail account:
 - Launch any e-mail client that is compatible with the e-mail protocol selected on any computer with e-mail access.
 - Create a new e-mail account, specifying the incoming mail settings provided in (2).
 - Send and receive e-mail.
 - Remove the e-mail account settings and close the e-mail client.
5. Ensure that your BlackBerry Enterprise Server (BES) is configured as a Mobile Data Service (MDS) Push Server.

To start the MDS service:

- In BlackBerry Manager, right-click on the server, select “Service Control,” then start BlackBerry Mobile Data Service.

or

- From Windows Services, start the BlackBerry Mobile Data Service.

To configure the BES as an MDS Push Server:

- In the BlackBerry Manager application, right-click the BES server and ensure that the option “Set as Mobile Data Service Push Server” is enabled.

Record the MDS push server name and web server listen port in the table provided above.

Step 2: Installation

1. Run setupImpForBes.exe from the Impatica installation CD-ROM or ZIP archive.
2. Follow the instructions presented by the installation wizard. By default, this will install files to the directory C:\Program Files\ImpaticaForBES and will register three new services: Impatica Conversion Manager, Impatica Converter1 and Impatica Converter2.

Note: For DIIOP on Lotus Domino, access is required to the NCSO.jar file that is deployed with the Domino Server Software. To make this file accessible to Impatica for BES, complete the following steps:

1. *Locate the NCSO.jar file in the <Domino Server install path>\Data\domino\java folder (e.g., C:\Lotus\Domino\Data\domino\java\NCSO.jar).*
2. *Copy the NCSO.jar to the <Impatica for BES install path>\lib\ext folder.*

Step 3: Configuration

The Impatica for BlackBerry Enterprise Server administration utility must be used to configure your Impatica for BES server software and Impatica Attachment Handler.

1. From the Start Menu, select the “Impatica for BES Administration Utility” shortcut. Or, in the <Impatica for BES install path>/bin folder and double-click ImpForBESAdminUtility.exe.

Note: The first time that the Impatica for BES Administration Utility is run, you will be notified that there was a communication failure with the Conversion Manager, since the Conversion Manager service is not yet running. Click OK to proceed.

2. In the Configuration tab, enter your registration information, BlackBerry Enterprise server options and e-mail settings from Step 1, and customize the other settings for your use.

Option	Description
Registration Information	The information in this group is required in order to start and run the Impatica for BES Conversion Manager, Converter1 and Converter2 services.
Registration user	Your registration name as it was provided to you.
Registration organization	Your registration organization name as it was provided to you.
Registration code	Your registration code as it was provided to you.
General Settings	
Maximum PowerPoint Attachment Size	The largest PowerPoint file size permitted for conversion.
Enable editing of maximum handler cache size	Specifies whether or not the BlackBerry handheld user can modify the maximum handler cache size.
Maximum handler cache size	The maximum total file size of temporary presentations on the BlackBerry handheld.
	<i>Note: This setting applies to the temporary presentation space used to locally cache presentations on the BlackBerry handheld. Users may elect to save presentations, which is unaffected by this setting.</i>
Service Registration Settings	
Use registered converters only	When enabled, only specified converters can be used by the conversion manager. When disabled, all converters available on the local area network will be automatically detected and used. Recommended setting: disabled <i>Note: Enabling this setting is supported only for use with static IP addresses.</i>
Registered converters	The comma-delimited IP addresses of converters, to be used when the option “Use registered converters only” is selected.

	Recommended Setting: empty
Use registered conversion managers only	<p>When enabled, only specified conversion managers can use the converter services. When disabled, the converters will automatically be detected and used by all conversion managers on the local area network.</p> <p>Recommended setting: disabled</p> <p><i>Note: Enabling this setting is supported only for use with static IP addresses.</i></p>
Registered conversion managers	<p>The IP address and port of each conversion manager that can use this computer's converters.</p> <p>Recommended setting: empty</p>
Use local converters only	<p>When enabled, this computer's conversion manager service can only use converters also running on this computer. This setting is applicable only when "Use registered converters only" and "Use registered conversion managers only" are not selected.</p> <p>Recommended setting: enabled</p>
Conversion manager converter listen port	The port over which the conversion manager service will communicate with the converter services.
Conversion manager administration listen port	The port over which the conversion manager service will communicate with the Administration Utility application.
Converter Restart Settings	
Scheduled restarts enabled	<p>When selected, the converter services will automatically restart at the specified schedule.</p> <p>Recommended Setting: enabled</p>
Scheduled restart time	<p>The time of day at which converter service restarts must begin. The 24 hour clock is used for this setting.</p> <p>Recommended Setting: a typically idle time such as midnight (00:00).</p>
Time between converter restarts	<p>The delay between restarting each converter service (i.e., Converter1 and Converter2).</p> <p>Recommended setting: 3600 sec</p>
Scheduled restart period	The number of days between scheduled converter

restarts.

Recommended setting: 1 day

BlackBerry Enterprise Server Settings

MDS push server name or IP address	The IP address or server name of the BlackBerry Enterprise Server to be used for MDS push service.
------------------------------------	--

Web server listen port	The BlackBerry enterprise server MDS push web server listen port (BlackBerry default is 8080).
------------------------	--

E-mail Settings

E-mail server type/protocol	The protocol (IMAP, OWA or DIOP) to be used to access the e-mail account created for the Impatica for BES software. The remainder of the E-mail settings depend upon the selection made for this option.
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IMAP E-mail Settings

Server name or IP address	The name or IP address of the e-mail server used to access the e-mail account created for the Impatica for BES software.
---------------------------	--

User name	The e-mail user name required to access the e-mail account created for the Impatica for BES software.
-----------	---

Password	The password required to access the e-mail account created for the Impatica for BES software.
----------	---

User alias	If the user alias used to access the e-mail account created for the Impatica for BES software is different than the user name provided, it must be supplied.
------------	--

Full e-mail address	The full e-mail address of the e-mail account created for the Impatica for BES software.
---------------------	--

NetBIOS name	Required only for Microsoft Exchange 2000 or 2003 server.
--------------	---

IMAP error retry interval	The number of milliseconds that the Impatica for BES software must wait before trying to reconnect to the IMAP server after encountering an error.
---------------------------	--

SSL enabled	Whether secure socket layer is enabled for the Impatica for BES e-mail account.
-------------	---

OWA E-mail Settings for Microsoft Exchange 2000+

Server name or IP address	The name or IP address of the Exchange e-mail server used to access the e-mail account created for the Impatica for BES software.
OWA domain name	The domain to which the user assigned to the Impatica for BES software belongs.
OWA request URL (relative path)	The relative path to the Outlook Web Access client. Example: “exchange/” <i>Note: This relative path will be appended to the Server name or IP address property to form the full OWA request URL (e.g., http://10.0.1.214/exchange/). To verify that you have entered the correct values, enter the full OWA request URL (i.e., <Server name or IP address>/ <OWA relative path>) into a web browser. You should get a login prompt on the Exchange mail server.</i>
User name	The e-mail user name required to access the e-mail account created for the Impatica for BES software.
Password	The password required to access the e-mail account created for the Impatica for BES software.
Full e-mail address	The full e-mail address of the e-mail account created for the Impatica for BES software.
SSL enabled	Whether secure socket layer is enabled for the Impatica for BES e-mail account.

DIOP E-mail Settings for Domino

Server name or IP address	The fully qualified Internet host name field in the Server document. Note that this host must be reachable using the ping utility.
User name	The User name field in the user’s Person record in the host’s Domino Directory. The alternate name may also be used. This should not be confused with the Short name/UserID value.
Password	The Internet password for the user found in the user’s

Person record. This is not set by default and must be set explicitly. It may but is not necessarily the same as the Notes UserID password.

Full e-mail address	The Internet address for the user assigned to the Impatica for BES software.
Domino DIIOP port	The port on which the DIIOP server task is operating.
Domino HTTP port	Required only for Domino version 5.

3. In the configuration options, you will be able to specify the use of registered converters and conversion managers only. In order to use the preferred auto-detection mechanism for registering the installed converters and conversion manager, leave this setting de-selected.
4. Click “Apply” to apply your configuration changes.
5. The current configuration and connectivity can be automatically verified by clicking the “Test Settings” button. If the administration utility indicates that it cannot connect, review and re-enter your settings. If necessary, repeat the verification performed in (4) of Step 1: Pre-installation Configuration.

Step 4: Start Services

1. In the administration tool, go to the Status tab.
2. Start the following services:
 - Impatica Conversion Manager
 - Impatica Converter1
 - Impatica Converter2

If you have not entered all of the necessary configuration information, the services will not be able to start. Should you receive notification that there is some missing or invalid configuration information, return to the configuration tab and enter the necessary information.

Step 5: Handler Installation

The handheld software is located in the directory *<ImpaticaForBES installation path>*ImpHandler and is made up of the following files:

File Name	Description
ImpViewer.cod ImpViewer-1.cod ImpViewerResource.cod Imp4BESResource.cod	The files to be installed on each BlackBerry handheld.
ImpViewerAndHandler.alx	The Desktop Manager descriptor, used to install the Impatica Attachment Handler via the BlackBerry Desktop Manager or to push the application to the handhelds wirelessly through the BES.
ImpViewerAndHandler.jad	The application descriptor that is used to install the Impatica Attachment Handler over-the-air from a web site.

Once the Impatica for BES software has been installed and configured, BlackBerry handhelds can be Impatica-enabled by installing the Impatica Attachment Handler. This software must be installed on each handheld that will use the Impatica for BlackBerry Enterprise Server software to view PowerPoint e-mail attachments.

There are three ways to install the handler on the handheld:

- **Send the application to handhelds wirelessly**
Use the BlackBerry Enterprise Server to send the application to the handhelds wirelessly. For details on how to do so, refer to your BlackBerry Enterprise Server Handheld Management Guide, Version 4.0 in the section “Send third-party software applications to handhelds wirelessly.”
- **Install over-the-air from a web site**
Upload the files ImpViewerAndHandler.jad, ImpViewer.cod, ImpViewer-1.cod, Imp4BESResource.cod and ImpViewerResource.cod to a web site and direct handheld users to download the link *<your web site>/ImpViewerAndHandler.jad*.

Note: To use this delivery method, ensure that your server has the MIME types set as follows:

text/vnd.sun.j2me.app-descriptor .jad

text/vnd.wap.wml .wml

application/vnd.rim.cod .cod

- **Install over USB from the BlackBerry Desktop Manager**

Use the BlackBerry Desktop Manager Application Loader and load the file ImpViewerAndHandler.alx from the handler directory.

Note: The Impatica Attachment Handler will convert PowerPoint files attached to e-mail messages received on the handheld after this installation. To view PowerPoint attachments that were received as e-mail attachments prior to installation, simply forward the e-mail message back to the same e-mail address.

5 Administration Utility

The Impatica for BES software can be configured and monitored via the Impatica for BES Administration Utility.

By default, a shortcut to the Impatica for BES Administration Utility will be added to the Start menu upon installation. The utility may also be launched from the ImpForBESAdminUtility.exe in the directory *<ImpaticaForBES installation path>\bin*.

5.1 Server Role

The Impatica for BES server software can be configured to operate as a Conversion Manager, a Converter or both. In most configurations, the server software should be configured to operate both a conversion manager and two converters. In a distributed environment, however, the conversion manager and converter services may operate on independent servers.

The Server Role combo box can be used to specify whether the Impatica for BES server software should operate as a Conversion Manager only, Converter only or All. Select Conversion Manager only or Converter only when establishing a distributed environment for Impatica for BES. In all other cases, select “All.”

5.2 Refresh

The values presented in the Impatica for BES administration utility will be updated only when a refresh occurs. To specify how often automatic refreshes should occur, select the desired setting from the Refresh Interval combo box. To refresh immediately, click the Refresh button.

5.3 Configuration Tab

The configuration tab must be used to establish the initial configuration of the Impatica for BES system. Changes to the current configuration can be made by clicking the “Apply” button. Be sure to restart the Conversion Manager and Converter services after making any changes to the configuration.

The Impatica Attachment Handler will also need to be re-installed if one or more of the following settings has been changed: “Enable editing of maximum handler cache size,” “Maximum handler cache size,” or “Full e-mail address.”

At any time, the current configuration can be tested by clicking the “Test Settings” button. Doing so will cause Impatica for BES to validate the configuration settings and to test e-mail connectivity using the values provided.

5.4 Status Tab

The status tab provides two primary functions:

- (i) It offers a mechanism for starting and stopping each of the Conversion Manager and Converter services; and
- (ii) It displays a list of the converters currently associated with the local conversion manager, displaying their current status.

To start or stop a service, click the “Start” or “Stop” button next to the appropriate service name.

5.5 Jobs Tab

The jobs tab presents the list of jobs that have been received by the conversion manager and are either currently being converted or are pending conversion. The file name, PowerPoint file size, destination e-mail address, date submitted and status are presented for each job. As well, the total number of pending and processing jobs is provided.

To cancel a job that is either in progress or pending, select the job in the job list, then click the “Cancel Job” button.

5.6 Cache Tab

The Impatica for BES server software cache accelerates the conversion of PowerPoint presentations by storing copies of already converted presentations. Once a conversion request is received for a presentation that is stored in the server software cache, the converted presentation is taken immediately from cache and sent to the BlackBerry user. The cache is comprised of memory cache, which stores recently converted presentations, and disk cache, in which copies of older converted presentations are kept.

The cache tab provides statistics about the server software cache and a summary of the total number of presentations in cache. At any time, the cache can be emptied by clicking the “Clear Cache” button. Doing so will clear both the memory and the disk cache.

5.7 Logs Tab

Several log files are used by the Impatica for BES server software to record the status of the Conversion Manager and Converter services. Each of the following log files will be created and updated as the Impatica for BES software runs:

File Name	Description
conversionmanager_wrapper.log	Provides information about the starting and shutting down of the Conversion Manager service.
converter_wrapper1.log	Provides information about the starting and shutting down of the Converter1 service.
converter_wrapper2.log	Provides information about the starting and shutting down of the Converter2 service.
ImpaticaConversionManager.log	Records information about receiving and delegating conversion requests and sending converted presentation data.
ImpaticaConverter_ <i>portnumber1</i> .log	Records information about the conversion of presentations delegated to the Converter service operating on port <i>portnumber1</i> .
ImpaticaConverter_ <i>portnumber2</i> .log	Records information about the conversion of presentations delegated to the Converter service operating on port <i>portnumber2</i> .
Impatica.log	Records system wide messages.

Any of the Impatica for BES log files can be viewed by selecting it in the list of log files. The contents of the log file will be displayed in the lower pane of the tab. To browse the log file folder directly, click the “Browse Log Folder” button.

New log files will be created each day at midnight, and old log files will be automatically archived. These archived log files may be deleted at any time in order to reduce the disk space used.

Appendix A:

Supported PowerPoint Features

Impatica for BlackBerry Enterprise supports the majority of PowerPoint features and elements, including formatted text, graphics, charts, hyperlinks, animations and slide transition effects. Sounds and videos cannot currently be reproduced on the BlackBerry platform and therefore remain unsupported.

The following list specifies in detail which PowerPoint features are currently supported by Impatica for BlackBerry Enterprise Server.

File Formats

Supported

- PowerPoint X, 97, 2000, 2002 (XP) and 2003 file formats

Not Supported

- Presentations saved as “PowerPoint 97-2000 & 95 Presentation” format
- PowerPoint 98 or PowerPoint 2001 for Macintosh file formats

Page Setup

Supported

- Slide proportions are maintained

Not Supported

- None

Slide Masters

Supported

- Slide master
- Title master
- Backgrounds
- Graphics
- Placeholder formatting
- Footers
- Animation
- Omit Master Slide graphics

Not Supported

- Multiple Masters

Backgrounds

Supported

- Solid fills
- Gradient fills
- Pictures
- Textured fills
- Patterned fills
- Omission of background graphics from master

Not Supported

- None

Slide Design Templates

Supported

- All standard and custom slide design templates that utilize supported shapes, graphic objects and animation effects
- Most of the design templates distributed with PowerPoint 97, 2000, 2002 (XP) and 2003 are translated acceptably

Not Supported

- Eclipse
- Radial
- Teamwork
- Sandstone

Slide Layouts

Supported

- All Slide Layouts

Not Supported

- None

Text Formatting

Supported

- Fonts, font sizes
- Bold, italic, underline, shadow, embossed, colors, super/sub script
- Auto-numbered text, numbered lists
- Bullets with various fonts, sizes and color
- Animated bullets, picture bullets
- Center, left and right alignment
- Tabs, first line indent, margins
- Line spacing, space before and after paragraphs
- Rotation of text, rotation of text within a rotated shape
- Hyperlinks
- Special characters
- Super/sub script
- Text in AutoShapes and associated text box settings: text anchor point, internal margins, word wrap, resize AutoShapes to fit text, and rotate text within AutoShapes by 90°
- Vertical and horizontal alignment in a shape
- WordArt (2D)

Not Supported

- Full justification
- 3D shape and WordArt effects

Graphics Formats

Supported

- Charts, graphs, organization charts
- Diagrams (PowerPoint 2002 (XP) and 2003)
- GIF, JPEG, PICT (Mac ClipArt format), PNG ,TIF, Windows Enhanced Metafile (EMF), WMF (Windows Clip Art)
- Tables

Not Supported

- None

Image Manipulation

Supported

- Color adjustments
- Cropping
- Picture effects
- Scaling

Not Supported

- Brightness and contrast control
- Flip
- Image control (e.g. grayscale, black & white, etc.)
- Rotation
- Transparent color

Shape Types

Supported

- AutoShapes including More AutoShapes (PowerPoint 2002 (XP) and 2003)
- Free-hand polygons
- Lines, connectors
- WordArt (2D)

Not Supported

- 3D WordArt

Shape Formatting

Supported

- Alterations of most autoshapes using the customization handle (yellow diamond)
- Arrowheads
- Solid, gradient, pattern, texture and picture fills
- Grouped shapes
- Horizontal and vertical flip
- Solid color outlines, dashed lines
- Rotation
- Scale
- Shadow effects

- Transparency settings on fills
- Line thickness

Not Supported

- 3D effects
- Double and triple line styles
- Transparency in gradient fills

Objects that can be Animated

Supported

- Any supported graphic format
- Any supported shape
- Groups of shapes
- Text and shape as one object
- Text as a single block (all paragraphs at once)
- Text separated by paragraph levels
- Text separated by words or letters

Not Supported

- Chart effects
- Animation of Media Objects

Animation Effects

Supported

- All PowerPoint 97, 2000 and X effects
- PowerPoint 2002 (XP) and 2003 motion paths
- PowerPoint 2002 (XP) and 2003 effects, as follows.

Basic	Subtle	Moderate	Exciting
<i>Entrance</i>	<i>Entrance</i>	Ascend	Boomerang
Appear	Expand	Center revolve	Bounce
Blinds - Horizontal	Fade	Color typewriter	Credits
Blinds - Vertical	Faded swivel	Compress	Curve up
Box - In	Faded zoom	Descend	Float
Box - Out		Ease in	Fold
Crawl In	<i>Emphasis</i>	Grow & turn	Glide
Dissolve In	Complementary color	Rise up	Magnify
Flash Once	Complementary color 2	Spinner	Pinwheel
Fly In	Contrasting color	Stretch across	Sling
Peek In	Darken	Stretch from bottom	Spiral in
Random Bars	Desaturate	Stretch from left	Swish
Split	Flash bulb	Stretch from right	Swivel
Wipe	Lighten	Stretch from top	Thread
	Vertical highlight	Unfold	Whip
<i>Emphasis</i>		Zoom in	
Change fill color	<i>Exit</i>	Zoom out	<i>Emphasis</i>
Change font color	Fade		Blink
Change line color	Faded swivel	<i>Exit</i>	
Grow/shrink	Faded zoom	Ascend	<i>Exit</i>
Spin		Center revolve	Boomerang
Transparency		Collapse	Bounce
		Color typewriter	Credits
<i>Exit</i>		Descend	Curve down
Crawl out		Ease out	Float
Fly out		Grow & turn	Fold
Peek out		Sink down	Glide
		Spinner	Magnify
		Stretchy	Pinwheel
		Unfold	Sling
		Zoom	Spiral out
			Swish
			Swivel
			Thread
			Whip

Not Supported*

- Bold reveal
- Bold flash
- Change font size
- Change font style
- Change font
- Flip

- Grow with color
- Light Speed
- Style emphasis
- Chart effects
- Rotation of images during animation

* These effects are substituted with similar effects.

Animation Effect Options

Supported

- Auto-reverse
- Delay
- Delay between words and letters
- Effects on individual paragraphs
- Hide after animation
- Inserted sound as animation
- Repeat set number of times
- Rewind
- Sound or stop sound with animation
- Speed (duration)
- Text in reverse order
- Text by word, letter
- Triggers: on click, after previous, with previous

Not Supported

- Dim or change color after animation
- Hide on next mouse click
- Repeat until end of slide or until next click
- Smooth start and end
- Trigger by clicking another object

Animation Timing

Supported

- Delay
- Speed (duration)

- Start on click
- Start after previous
- Start with previous
- Animation timings recorded during Rehearse Timings or Record Narration

Not Supported

- Pause or continue slide show while playing setting
- Stop playing after current slide or after ... slides setting
- Trigger: Start effect on click of another object

Media

Supported

- None

Not Supported

- Sound
- Video

Action Settings and Hyperlinks

Supported

- Impatica for PowerPoint supports the following Action Settings:
 - Action on Mouse Click:
 - Hyperlink to next slide
 - Hyperlink to previous slide
 - Hyperlink to first slide
 - Hyperlink to last slide
 - Hyperlink to specific slide within the current presentation
 - Hyperlink to URL
 - Hyperlink to an e-mail address

Not Supported

- Hyperlinks to other files, to e-mail address and to play sound

Transition Effects

Supported

- None (no transition)
- Blinds horizontal and vertical
- Box in and out
- Checkerboard
- Cover (all directions)
- Cut
- Cut through black
- Dissolve
- Fade (PowerPoint X)
- Random bars horizontal and vertical
- Split horizontal in, horizontal out, vertical in and vertical out
- Uncover (all directions)
- Wipe left, right, up and down
- Comb horizontal and vertical
- Fade smoothly
- Fade through black
- Push (all directions)
- Circle
- Diamond
- Plus
- Wedge
- Wheel: 1, 2, 3, 4 and 8

Not Supported

- News flash (mapped to Box Out)
- Random (mapped to Dissolve)
- Strips (mapped to Wipe)

Slide Advance

Supported

- Impatica for PowerPoint supports the following Slide Advance settings:
- Automatically after ... seconds
- Advance on space key
- Both automatically and on mouse click

Not Supported

- none

Miscellaneous Features

Supported

- Color schemes
- Hidden slides

Not Supported

- Action items
- Agenda slide
- Custom shows
- Image map authoring tools and hot spots
- Meeting minders

Appendix B:

Lotus Domino Configuration

Impatica for BlackBerry Enterprise Server can be configured to operate with a Lotus Domino mail server, as described in *Section 4, Installation*, using either IMAP or DIIOP. This appendix provides more detailed information on how to configure and use the Lotus Domino server for use with the Impatica for BES software.

User Settings

The Impatica for BES requires the use of a dedicated user account on the Domino server. To verify that the user settings are correct for use with Impatica for BES:

1. Open the person document for the user that is dedicated to Impatica for BES.
2. Verify that the User name used to connect to the mailbox is the first one listed in the User name field.
3. Verify that the Internet password is set.

Note: The password will not be displayed even though a password is set. You must edit the person to see the password. This is the password to be used when connecting to the mailbox via DIIOP or IMAP.

4. Verify the Internet address is set.
5. Verify that the Mail System is properly set. If Impatica for BES will be using the DIIOP mail connector, then the Mail System should be set to “Lotus Notes.” If Impatica for BES will be using the IMAP mail connector, then the Mail System should be set to “IMAP.”
6. Verify the Format preference for incoming mail. For DIIOP connection, ensure that it is set to “Keep in senders’ format.” For best performance on IMAP, select “Prefers MIME.”

Server Tasks

- If using DIIOP, ensure that the DIIOP task is running. In the Server tab, select Servers Tasks for a list of available tasks. Click on the Task menu to start, stop or restart tasks.
- If using IMAP, ensure that the IMAP server is running. In the Server tab, select Server Tasks for a list of available tasks. Click on the Task to start, stop or restart tasks.

Server Configuration

General

1. Open the Server document.
2. Click Basics.
3. Ensure that the fully qualified Internet host name (the e-mail host to which Impatica for BES will connect) can be pinged, otherwise a DIIOP connection will fail.

IMAP SSL

If using IMAP with SSL:

1. Click Ports... Internet Ports.
2. Specify the SSL information if applicable.
3. Click Mail tab.
4. Under the IMAP column, set the TCP/IP port status to: Redirect to SSL.
5. SSL Port status should be set to Enabled.

DIIOP

If using DIIOP:

1. Click Ports... Internet Ports... DIIOP.
2. Verify the port number.
3. Click Internet Protocols... DIIOP.
4. Set the Idle session timeout to 20 minutes.
5. If a Host name/Address is specified this is the e-mail host to which Impatica for BES must be configured to connect. Otherwise, the default is set by the TCP/IP network. See Ports... Notes Network Ports for the default.

Messaging Configuration

IMAP

1. Follow instructions in the Domino Administrator 6 Help on how to set up the IMAP service.
2. Open Messaging Settings
3. Click IMAP tab
4. If using IMAP on Domino verify that the Max number of IMAP sessions is blank (no max) or set to a suitable value
5. If using IMAP mail connector you can set the Enable IMAP during login to Enabled to automatically enable a mail file for IMAP. This applies to all mail files on the server if an IMAP client is used to access a mail file.
6. To check if a mail file is IMAP enabled, open the mail file and click File ... Database ... Properties. Click the info tab.

Mail Clients

IMAP

If using the IMAP protocol to connect to the Domino mailbox you may use any IMAP client to view the message in the inbox.

DIOP

If using the DIOP protocol to connect to the Domino mailbox you **MUST** use the Notes client to view the messages. If you attempt to view the messages using an IMAP client and your Format preference for incoming mail is set to Prefers MIME then the attachment will be converted and will be corrupted when accessed via DIOP.

Appendix C:

Troubleshooting

Should you encounter any difficulty with Impatica for BES, review the troubleshooting tips below.

If you require further assistance, please contact Impatica's BlackBerry Customer Support Team: bbsupport@impatica.com.

Installation

After installing the software, the buttons on the Status tab of the Administration Utility are disabled and the services are not listed in the services applet

The installer failed to create the services. To create them manually:

7. Open a command prompt window to `<Impatica for BES install path>\bin`.
8. Type "installconversionmanager" to install the conversion manager service.
9. Type "installimpconverter 2" to install two converter services. Installing more than two converter services will degrade the system's performance.

Configuration

When I try to enable SSL my e-mail connection test fails.

Ensure that SSL is enabled on the server. If you are using a non-trusted SSL certificate then you must import the certificate using the ImportTrustedAuthority utility. To run the utility:

1. Open a command prompt window to `<Impatica for BES install path>\bin`.
2. Type "java com.impatica.imphost.util.ImportTrustedAuthority" to display the usage instructions for the utility.

Example:

```
java com.impatica.imphost.util.ImportTrustedAuthority -import -alias mymailserver  
-file mycert.cer -keystore ../lib/security/cacerts -storepass changeit
```

The message "Certificate added" will indicate that the import succeeded.

When I try to connect to Domino via DIIOP, my Conversion Manager service won't start and test settings always fails.

Ensure that you have copied the NCSO.jar file to the lib\ext folder.

How do I test that MDS Push is functioning?

1. Download and unzip the utility at:
www.blackberry.com/developers/journal/july_2005/BlackBerryBulkPush.zip.
2. Execute BlackBerryPushDemo.exe in the BlackBerryBulkPush\Release folder.
3. Enter the parameters for the push as follows:
 - BES Address: IP address or host name of BES
 - WebServer Listen Port: port where MDS push requests should be sent (8080 or 8300)
 - Push Type: Browser-Channel (creates icon on home screen), Browser-Message (sends e-mail)
 - URL: URL of an HTML page to push to device
 - Push Name: Text to display when icon is selected or in subject of e-mail
 - Read Icon URL: URL of an icon to display when link has been read (applies to Browser-Channel Push Type only)
 - Unread Icon URL: URL of an icon to display when link is unread (applies to Browser-Channel Push Type only)
 - PIN/E-mail: PIN or e-mail address associated with the device that will received push request
4. Click Send Push button
5. If the **Success** message appears on the bottom status bar then within a few seconds an e-mail will show up in the inbox for a Browser-Message push or a new icon will be created on the home screen for a Browser-Channel push

Open the e-mail or the icon to view the pushed content

To delete the icon:

- Launch the BlackBerry Browser
- Expand the Browser Channels
- Select the pushed content
- Select Delete Channel

6. If the **Push Failed, could not send** message appears on the bottom status bar then:
 - Verify on the BES Server that the MDS service is running by accessing the URL to the MDS server from a web browser (i.e. winserver2003:8080). If it is not running then start the service from the BlackBerry Manager application on the BES Server.
 - Verify in BlackBerry Manager on the BES Server that the MDS Server is set to Push Server
 - Verify in BlackBerry Manager on the BES Server that MDS is enabled

NOTE: If you make a change to the BES Server settings you must restart the MDS Service for changes to take effect.

Usage

When I select View Attachment on my Blackberry I get a pinwheel for a long time.

1. Ensure that the handler is configured to send conversion requests to the correct conversion e-mail account. In the Impatica for BES Administration Utility's Configuration Tab, change the full e-mail address to the e-mail address that has been dedicated to Impatica for BES. Reload the handler software from the <Impatica for BES>\ImpHandler folder anytime this e-mail address is changed.
2. Without starting the services, verify that the conversion request e-mail messages are arriving in the Impatica for BES mailbox INBOX.
3. After starting up the services, verify that the e-mail messages are processed and deleted from the inbox.
4. The presentation should be delivered to the handler. If the presentation is still not delivered, look in the ImpaticaConversionManager.log file for "Queued outgoing packet" and "MESSAGE SENT." Also check the ImpaticaConverter logs for error messages.
5. Ensure that the "BlackBerry Mobile Data Service" is started in the window services applet. If this is not enabled, everything will appear to work correctly, (including the admin utility tests), however the messages will never get pushed to the handheld.

Administration Utility

I changed some settings in the Configuration tab but it doesn't seem to recognize the change.

If any of the following fields are changed then the handler application must be reloaded:

- Full e-mail address
- Enable editing of maximum cache size on handler
- Maximum handler cache size (bytes)

Ensure you restart all services for the changes to take effect on the server.