



IBM System x  
IBM Upward Integration for  
VMware vSphere  
Release Notes

*Version 3.0.1*







IBM System x

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VMware vSphere  
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**Note**

Before using this information and the product it supports, read the information in “Notices” on page 7.

**Edition notice**

This edition applies to version 3.0.1 of the IBM Upward Integration for VMware vSphere and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Contents

<b>About this publication</b>	<b>v</b>
Conventions and terminology	v

<b>Information resources</b>	<b>vii</b>
World Wide Web resources	vii

<b>Chapter 1. About this release</b>	<b>1</b>
What is new in this release	1

Premium features	1
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<b>Chapter 2. Known limitations, problems, and workarounds.</b>	<b>3</b>
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<b>Notices</b>	<b>7</b>
Trademarks	8



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## About this publication

These Release Notes® provide the latest information for the IBM® Upward Integration for VMware vSphere, version 3.0.1. IBM Upward Integration is used to acquire system information, update firmware, monitor power usage, manage predicted failures, and change advanced system settings in a VMware vCenter management environment.

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## Conventions and terminology

This topic provides information about conventions and terminology used in these release notes.

**Note:** These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

The following table describes some of the terms, acronyms, and abbreviations used in this document.

*Table 1. Frequently used terms and acronyms*

Term/Acronym	Definition
ASU	Advanced Settings Utility
DSA	IBM Dynamic System Analysis
IMM	Integrated Management Module
IVP	IBM Upward Integration for VMware vSphere
PFA	Predictive Failure Alert
UXSP	UpdateXpress System Packs
UXSPi	UpdateXpress System Package Installer





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## Information resources

This topic provides additional information about IBM Upward Integration for VMware vSphere, version 3.0.1 that is available on the World Wide Web.

You can find additional information about IBM Upward Integration for VMware vSphere, version 3.0.1 in the product documentation and on the World Wide Web.

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## World Wide Web resources

The following web pages provide resources for understanding, using, and troubleshooting IBM System x<sup>®</sup>, BladeCenter<sup>®</sup> blade servers, and systems-management and systems-deployment tools.

### **IBM Upward Integration for VMware vSphere site**

IBM Upward Integration for VMware vSphere site

Locate the latest downloads for the IBM Upward Integration for VMware vSphere.

### **IBM Systems Technical support site**

IBM Systems Technical support site

Locate support for IBM hardware and systems-management software.

### **IBM Systems Management Software: Download/Registration page**

IBM Systems Management Software: Download/Registration page

Download IBM systems-management and systems-deployment software.

### **IBM System x Systems Management page**

IBM System x Systems Management

Obtain an overview of IBM systems management using IBM Director Agent or IBM Director Core Services.

## **IBM ServerProven® page**

System ServerProven

Obtain information about hardware compatibility with IBM System x, IBM BladeCenter, and IBM IntelliStation® hardware.

## **VMware vCenter Product Family**

VMware vCenter Product Family

Obtain information about the VMware vCenter product family that describes how to monitor your IBM systems across large organizations using IBM and VMware applications and operating system knowledge to resolve operational problems.

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## Chapter 1. About this release

The topics in this section provide information about Version 3.0.1 of the IBM Upward Integration for VMware vSphere.

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### What is new in this release

This topic provides information about new and enhanced features of IBM Upward Integration for VMware vSphere version 3.0.1.

#### **Predictive Failure management**

The Predictive failure management function allows you to monitor the server hardware status. It automatically evacuates virtual machines in response to predictive failure alerts to protect your workloads.

#### **Rolling System Update**

The Rolling System Update function provides non-disruptive system update with zero downtime, automates the update process of the hosts in a cluster environment without any workload interruption, and supports updating multiple hosts concurrently to save your time.

#### **Cluster Overview**

The Cluster Overview page displays information for the selected cluster. The summary information displayed includes overall resource utilization, hosts health and connection status. It also displays IMM information of each host and allows you to launch the IMM console directly.

#### **Support for additional IBM servers**

IBM Upward Integration for VMware vSphere version 3.0.1 adds support for new IBM servers. For complete support list, see the *IBM Upward Integration for VMware vSphere Installation and User's Guide*.

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### Premium features

The following features are fee-based functions that are enabled if you purchase an activation license. You can purchase an activation license by contacting your IBM representative or an IBM Business Partner.

#### **Dashboard**

The Dashboard provides an overview of the host status, including a system information summary and system health messages.

The Dashboard provides an overview of the selected host or cluster. The summary information displayed includes overall resource utilization, hosts health messages and connection status. It also displays IMM information for each host and allows you to launch the IMM console directly.

#### **Dynamic System Analysis**

The Dynamic System Analysis (DSA) collects and analyzes system information to help diagnose system problems.

#### **Firmware update**

The Firmware update function acquires and applies IBM UpdateXpress System Packs (UXSPs) and individual updates to your ESXi system. The Rolling System Update function provides the non-disruptive system update with zero downtime, it automates the update process of the hosts in a

cluster environment without any workload interruption, it supports updating multiple hosts concurrently to save your time.

#### **Power<sup>®</sup> Metric**

Power Metric monitors and provides a summary of power usage, thermal history, and fan speed, in addition to a trend chart of the managed host. The Power Metric function is either manually enabled or disabled on a host. You can also set the power capping for a power-capping capable host to limit the server power usage. The power throttling function is supported and provides notification if the server power usage exceeds the value you set.

#### **Advanced Settings**

The Advanced Settings Utility manages the current system settings on the host, including IMM, uEFI, and boot order settings for the host.

#### **Predictive failure management**

Predictive failure management monitors the server hardware status and receives predictive failure alerts. You can set a management policy for a server based on a predictive failure alert. Based on the policy you set, IVP will either evacuate VMs from the host or notify you. Predictive failure management is manually enabled or disabled on a host.

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## Chapter 2. Known limitations, problems, and workarounds

The following limitations, problems, and workarounds are applicable to the IBM Upward Integration for VMware vSphere, version 3.0.1.

### Limitations

The following limitations are applicable to the IBM Upward Integration for VMware vSphere, version 3.0.1.

**Predictive failure management does not work on some IBM servers with management policy set.**

#### Symptom

Predictive failure management is enabled and management policy is set, however some Predictive Failure Alert (PFA) indications never appear, and the management policy cannot be launched.

#### Description

This issue is a limitation of some IBM servers. Because predictive failure management relies on hardware PFA capability, when the server does not have the capability to generate PFA indications, then the user defined management policy cannot be triggered.

**IBM Upward Integration for VMware vSphere does not display the fan speed and thermal information for blade servers.**

#### Symptom:

If you are working with a blade server and try to view the power metric, the fan speed and thermal information entries are blank.

#### Description:

A blade server does not have a fan or thermal sensor, therefore the fan speed and thermal information entries are blank.

**IBM Upward Integration for VMware vSphere allows you to enter some of the IMM/uEFI settings, although these settings are not supported.**

#### Symptom:

Some of the IMM/uEFI settings are not supported. However, the input controls are not disabled, and you can still enter text.

#### Description:

IBM Upward Integration for VMware vSphere uses a symbol to indicate which settings are currently not supported on the host. The text that is entered is not saved.

**The lists of unsupported IMM/uEFI settings are disabled until you hover over them with a mouse.**

#### Symptom:

Some of the IMM/uEFI settings are not supported on the host. By default, the lists of these settings are not disabled until you hover over them with a mouse.

#### Description:

IBM Upward Integration for VMware vSphere uses a symbol to indicate which settings are currently not supported on the host. You cannot select the lists for these settings.

**IBM Upward Integration for VMware vSphere displays a warning stating there is a "script error" when you switch between pages too quickly.**

**Symptom:**

If the page you are viewing has not completely loaded and you try to open another page, IBM Upward Integration for VMware vSphere displays a warning stating there is a "script error."

**Description:**

The page-loading operation on the current page is not complete. Trying to access another page interrupts this operation and may cause this error. It is best to complete the current operation and allow the page to load completely before accessing another page.

**IBM Upward Integration for VMware vSphere displays a warning stating "an error has occurred in a script on this page" when initially loading IBM Upward Integration for VMware vSphere with vSphere Client.**

**Symptom:**

If this is the first time you access IBM Upward Integration tab with vSphere Client, IBM Upward Integration for VMware vSphere might display a warning stating an error has occurred in a script on this page.

**Description:**

The error displays, Permission denied. Select **Yes** to continue running script on this page, and then click **IBM Upward Integration** again to load this page. The page will display normally.

**IMM firmware update appears to fail due to timeout error, but the update is actually successful.**

**Symptom:**

The firmware update function reports the Integrated Management Module (IMM) firmware update as Installation did not succeed, and a timeout error appears in the IVP log. However, the diagnostic results show that the IMM firmware was updated successfully to the new version.

**Description:**

This issue is a limitation of the UXSPi tool integrated by IBM Upward Integration for VMware vSphere. UXSPi sometimes generates a timeout error even though IMM firmware is updated successfully.

**IBM Upward Integration for VMware vSphere cannot be accessed by blind and visually impaired computer users.**

**Symptom:**

Buttons on the IBM Upward Integration for VMware vSphere graphical user interface cannot be read correctly by the screen reading program used by blind and visually impaired computer users.

**Description:**

This issue is a limitation of DOJO that used to develop the IBM Upward Integration for VMware vSphere user interface. The DOJO button cannot be read correctly by the screen reading program.

**The installation program cannot roll back when you cancel the uninstallation process.**

**Symptom:**

If you cancel the uninstallation process after it begins, IBM Upward Integration for VMware vSphere cannot roll back uninstalled components.

**Description:**

This issue is a limitation of the IBM Upward Integration for VMware vSphere installation program.

**Action:**

Start the IBM Upward Integration for VMware vSphere installation program and completely uninstall the software. Then, install IBM Upward Integration for VMware vSphere again.

**IBM Upward Integration for VMware vSphere cannot update the firmware of the Qlogic and Brocade cards.****Symptom:**

You are unable to update the firmware of the Qlogic and Brocade cards.

**Description:**

IBM Upward Integration for VMware vSphere does not support firmware updates for both Qlogic and Brocade cards in this release.

**IBM Upward Integration for VMware vSphere keeps three years of Power and Cooling history data****Symptom**

IBM Upward Integration for VMware vSphere keeps three years of power and cooling history data and automatically removes the old data from the database.

**Description**

IBM Upward Integration for VMware vSphere collects power and cooling data for all of the hosts with Host Monitoring enabled. In order to improve the performance of vCenter, IBM Upward Integration for VMware vSphere keeps three years of the history data and automatically removes the old data.

**IBM Upward Integration for VMware vSphere may download a greater number of update packages from the IBM website than you initiated.****Symptom**

When you download updates from an IBM website, the number of update packages that are downloaded may be greater than the number you specified.

**Description**

Each update package may have prerequisite packages, and IBM Upward Integration for VMware vSphere downloads those as well. The package number that is downloading is displayed on the download page and might display more than the number of updates that you initiated.

## Known problems and workarounds

The following known problems and workarounds are applicable to the IBM Upward Integration for VMware vSphere, version 3.0.1.

### **IBM Upward Integration for VMware vSphere failed to request a ticket from the vCenter server for the target host.**

Sometimes the error message

Failed to request ticket from vCenter server

is displayed when you are working with IBM Upward Integration for VMware vSphere.

#### **Workaround**

Check the target ESXi host status and make sure that the connection between the ESXi host and vCenter is not lost. Then, restart the vSphere client.

### **Changing the Installation path when upgrading IBM Upward Integration for VMware vSphere causes history data loss.**

#### **Description**

If you change the installation path during an IBM Upward Integration for VMware vSphere upgrade, IBM Upward Integration for VMware vSphere is unable to use some historical data, such as diagnostic history, history power metrics, and the history firmware update repository.

#### **Workaround**

Copy the contents of the IVP\bin\data directory from the previous installation path to the new installation path.



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Version 3.0.1

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