Environment Manager 2018.3 Service Pack 1
Release Notes

Components in this Release

<table>
<thead>
<tr>
<th>Component</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>10.2.489</td>
</tr>
<tr>
<td>Server</td>
<td>10.2.489</td>
</tr>
<tr>
<td>Console</td>
<td>10.2.489</td>
</tr>
<tr>
<td>Database</td>
<td>10.2.26</td>
</tr>
</tbody>
</table>
**Important Upgrade Information**

This Upgrade section contains important functionality changes that have been introduced in Environment Manager v10.0 and above. Any information that is new to this release is specifically listed as Environment Manager 2018.3.SP1.

**Note**

We are including this extended information for the convenience of customers upgrading from an 8.x version.

**Windows Server**

Environment Manager 10.x Personalization Server requires Windows Server 2008 R2 SP1 or above. Microsoft mainstream support for both Windows Server 2008 and R2 ended on 13 January 2015, but we are continuing to support Windows Server 2008 R2 beyond this date.

**Windows Client**

Support for Windows XP, Windows Vista, and Windows Server 2008 has been deprecated for the Environment Manager Agent, therefore the Environment Manager 10.x Agent now requires Windows 7 SP1 or above and Windows Server 2008 R2 SP1 or above. Microsoft extended support for Windows XP ended on 8 April 2014, mainstream support for Windows Vista ended on 10 April 2012.

In addition, both Windows 7 SP1 and Windows Server 2008 R2 SP1 must be updated to support SHA-256.

**Note**

For details of Windows 7 SP1 and Windows Server 2008 R2 SHA-256 requirements, please refer to the following community article.

**SQL Server**

Support for SQL Server 2008 and 2008 R2 has been deprecated, the Environment Manager 10.x Personalization Server now requires SQL Server 2012 SP2 or above. Microsoft mainstream support for SQL Server 2008 and R2 ended on 8 July 2014.

Please refer to the [Required Utilities and Components](#) section for further details.

**Product Licensing**

Environment Manager 10.x requires a v2 product license key and this key must be deployed to all endpoints to which the EM v10.x Agent is deployed. The new license key can be installed alongside the existing 8.x license key and should be deployed at the same time or before the EM Agent is deployed. The new license key is deployable via Management Center 10.x and is available from Ivanti Licensing Support.

Further information on Licensing queries is available via the following community article.
Server Configuration Utility (SCU)

The Server Configuration Utility (SCU), which was used to configure instances of the Environment Manager Personalization Server, has been replaced in v10.x with the new Server Configuration Portal and PowerShell cmdlets. It is no longer possible to configure the Personalization Server using the SCU. The new Server Configuration Portal is not able to detect and repair all missing Windows Server and IIS components because it requires some Windows Server and IIS components to be in place first. The functionality to detect all missing Windows Server and IIS components has been moved to the User Workspace Manager Installer. A list of the required Windows Server and IIS components is available in the Required Utilities and Components section for anyone not using the User Workspace Manager Installer.

IIS Web Sites

Environment Manager 10.x Personalization Server Advanced Installations no longer install into the IIS default Web site, apart from in-place upgrades.

The installation creates a new Web site called Personalization with two configurable bindings, one of which can use host headers on port 80 and another on port 7771. Both are configurable during setup. To use host headers on port 80, DNS servers will need to be updated (refer to install and upgrade guide for further information). In place upgrades, will install into the default Web site, if that is where EMPS is currently installed.

When installing Environment Manager 10.1 FR2 Personalization Server in Evaluation Mode, to simplify the evaluation process we utilize the Default IIS Website and Port 80 in a similar method to previous 8.x installations.

Caution

Care should be taken not to install into the default Web site if other applications are using it, as Personalization Server now uses the root of whichever Web site it is hosted, further information is available in the Install and Upgrade help.

Environment Manager Browser Interface (EMBI)

The Environment Manager Browser Interface (EMBI) has been replaced in v10.x with the Personalization Operations (PersOps) console. PersOps does not provide User Self-Service functionality. Self-Service functionality for end users is provided via the Endpoint Self Service Tool (ESST), which is available for Users via a System tray shortcut on their Endpoint.

User Personalization Data

Introduced in Environment Manager 10.0, Personalization Groups are no longer used as a container for user personalization data. Personalization Groups are now only used for assigning settings to users. If a user falls into a different Personalization Group due to a membership rule changes, or Personalization Group hierarchy changes, or because Active Directory changes, their personalization data moves with them automatically. During the upgrade process, user personalization data that may have been orphaned due to user movement between Personalization Groups in the past will be merged. Where there is a conflict, the most recent user personalization data will be used. Pre-upgrade SQL scripts are included with the Personalization Server installation package to show the impact of any changes prior to upgrade.
File-Based Registry (FBR)

Environment Manager 8.x utilized a file-based registry (FBR) to personalize virtualized registry keys and values. In version 10.x, the FBR mechanism has been replaced with registry hives for efficiency and performance. FBR files created in 8.x versions of Environment Manager will not be upgraded until the global setting UpgradeFbrToHive is set to True. Once the UpgradeFbrToHive has been set to True (Not Reversible), the FBR files on the endpoints will be converted to registry hives at next logon or application launch. The old FBR files will remain in place for a period of at least 30 days, after which time they will be deleted if they have not been accessed by version 8.x agents.

For customers who want to stage the implementation of the New Registry Hive format from 8.x, you could first enable the UpgradeFbrToHive setting to True after Server Upgrade to 10.1 FR1 and then target specific Endpoints for 10.1 FR1 Agent deployment in controlled manner (via our Management Center for example). Please note that in this scenario, if a user roams between 8.x and 10.1 FR2 Agents, the 8.x Agent will continue using the Legacy FBR and the user settings are partitioned between 8.x FBR & 10.x Hive formats.

New Features

VHD Cache Roaming - Windows and Outlook Search

As of 2018.3 SP1 the Environment Management VHD Cache Roaming Feature has been enhanced to include support for roaming both the Windows and Outlook Search Indexes. Within the Cache Roaming Policy Action, you will see two new Cache Templates:

**Outlook Search Template**

Per-User profile Outlook Search index roaming between sessions in both VDI and RDSH. The Search cache can be roaming collectively with the OST file to deliver the complete Outlook 365 experience in a Non-Persistent environment, removing the lengthy and often expensive task of downloading the Profile and Search index at every logon.

**Windows and Outlook Search Template (Single User Workstations only)**

We can now roam the system-wide Windows Search Database between sessions on single-user desktops (VDI, kiosk/hotdesk PCs). In Non-Persistent environments where users frequently roam between devices it is common practice to disable Windows Search to avoid the resource overhead of a search re-index at every logon. This feature solves that problem by roaming the index within the user’s VHD, attaching to the desktop and delivering the search index from a locally stored directory.

Personalization Database - Azure SQL as a Service Compatibility

With this release it is now possible to deploy the Personalization database as an Azure SQL database. Prior to this release it was necessary to have an Azure virtual machine running Microsoft SQL server. This new feature means that you no longer need to use virtual machines to manage your SQL database in Azure.

Configuration and management of the database continues to be done via the Server Configuration Portal (SCP) and we still support on-premises and Azure virtual machine SQL server installations.
Personalization Template - User File Type Association Roaming (Windows 10)

Configure per-user File Type Association roaming for Windows 10 using the Windows Settings Group Template provided Out of the box. Persist user Default Application preferences across sessions ensuring a consistent and familiar User experience regardless of the device.

GeoSync AlwaysOn Support

In this release, AlwaysOn support has been added to GeoSync - that is, a GeoSync publisher database that is part of an AlwaysOn availability group can now be set so that failovers do not affect the operation.

Further details can be found by visiting the Ivanti help site.

Bugs Fixed

The following customer support issues have been resolved in this release:

<table>
<thead>
<tr>
<th>Problem ID</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>64537</td>
<td>Emuser.exe memory usage increases after every session lock / unlock</td>
</tr>
<tr>
<td>65948</td>
<td>VHD file not created in a multi-forest configuration</td>
</tr>
<tr>
<td>66209</td>
<td>Ivanti User Virtualization Manager service fails to start with Error 14001 after upgrading from 8.6 to 2018.1</td>
</tr>
<tr>
<td>67463</td>
<td>Cache Roaming not working in multi-forest domain</td>
</tr>
<tr>
<td>67343</td>
<td>GeoSync Failures - Primary Key Violations</td>
</tr>
</tbody>
</table>

Known Issues and Limitations

The known issues and limitations are now detailed on community.ivanti.com.

Supported Operating System and Technologies

The maintained Operating Systems and Technologies are now detailed in a maintained platform matrix.
## Required Utilities and Components

**Note**

For details of Windows 7 SP1 and Windows Server 2008 R2 SHA-256 requirements, please refer to the following [community article](#).

<table>
<thead>
<tr>
<th>Component</th>
<th>Required Utilities and Components</th>
</tr>
</thead>
</table>
| Database Server            | Microsoft SQL Server 2012 SP2 or above – all editions  
Microsoft SQL Server 2014 SP1 or above – all editions  
Microsoft SQL Server 2016 or above – all editions      |
| Personalization Server     | Microsoft Windows Installer 5.0  
.NET Framework 4.6.1  
Web Server (IIS):  
Common HTTP Features:  
Default Document  
Directory Browsing  
HTTP Errors  
Static Content  
HTTP Redirection  
Performance  
Static Content Compression  
Security:  
Request Filtering  
Basic Authentication  
IP and Domain Restrictions  
Windows Authentication  
Application Development:  
.NET Extensibility 4.6  
ASP.NET 4.6  
ISAPI Extensions  
SAPI Filters  
Management Tools:  
IIS Management Console  
IIS Management Scripts and Tools  
.NET Framework 4.6.1 Features:  
.NET Framework 4.6.1 |
## Component

<table>
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<th>Required Utilities and Components</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>ASP.NET 4.6</td>
</tr>
<tr>
<td></td>
<td>WCF Services:</td>
</tr>
<tr>
<td></td>
<td>HTTP Activation</td>
</tr>
<tr>
<td></td>
<td>TCP Port Sharing</td>
</tr>
<tr>
<td></td>
<td>IIS URL Rewrite Module 2</td>
</tr>
<tr>
<td></td>
<td>Windows PowerShell 3.0 or above</td>
</tr>
<tr>
<td></td>
<td>Microsoft Core XML Services (MSXML) 6.0</td>
</tr>
<tr>
<td></td>
<td>Microsoft Visual C++ 2017 Redistributable Package Update 3</td>
</tr>
<tr>
<td>Console</td>
<td>Microsoft Windows Installer 5.0</td>
</tr>
<tr>
<td></td>
<td>Microsoft .NET Framework 4.6.1</td>
</tr>
<tr>
<td>Client</td>
<td>Microsoft Windows Installer 5.0</td>
</tr>
<tr>
<td></td>
<td>XML Lite 1.0.1018.0</td>
</tr>
<tr>
<td></td>
<td>Microsoft Core XML Services (MSXML) 6.0</td>
</tr>
<tr>
<td></td>
<td>Microsoft Visual C++ 2017 Redistributable Package Update 3</td>
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</tbody>
</table>

## Further Help and Information

Information about installing, configuring, and using Environment Manager is available from the [product help.](#)