

# **RES ONE**®

## **Workspace**

### Upgrade Guide

Version 10.1.0.0

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## Chapter 1: Introduction

This document guides you through the upgrade from RES Workspace Manager 2011 and higher to RES ONE Workspace version 10.1.

You can upgrade your environment with the RES ONE Workspace Installer, `RES ONE Workspace Installer 10.1.0.0.exe`. This installation package contains all necessary MSI files (64-bit and 32-bit), wrapped up into one executable. When you run the installer on the target computer, you can select which components should be upgraded or installed, after which the installation wizard of these components will guide you through the process.

RES recommends a DTAP-street (Development, Testing, Acceptance, and Production) to allow a phased introduction of RES ONE Workspace version 10.1 into production.

### More information

- The **Release Notes** provide information on new and changed functionality. They are available at <http://success.res.com>.
- **Getting Started with RES ONE Workspace version 10.1** describes how to set up a sandbox environment to get started with RES ONE Workspace version 10.1. Please refer to this document for a complete overview of the prerequisites of all components.
- You can keep your version of RES ONE Workspace up to date by installing **Upgrade Packs**. This requires Solution Assurance, which is a service that you can buy from RES. Solution Assurance, entitles you to technical support, product upgrades, and access to the Knowledge Base. For more information: <http://success.res.com>.



#### Note

Please contact RES Software Support if you are running RES PowerFuse 2010 and want to upgrade to RES ONE Workspace version 10.1. You can also consult the **RES Workspace Manager 2011 Upgrade Guide** for more information.

## 1.1 Workspace components

RES ONE Workspace consists of six major components:

- Management Console
- Management Portal
- Datastore
- Relay Server (optional)
- Agent
- Workspace Composer

### Management Console

The Management Console is the central point of administration of the User Workspace. It is usually run from an administrator's workstation. The Management Console stores all the configuration data in the Datastore.

### Management Portal

The Management Portal will be the new location for administration of the User Workspace. It is a web-based application that works alongside the Management Console. Currently, you can access **Workspace Analysis**, the **Audit Trail**, **Security** section, and **RES Reporting** from the Management Portal.

### Datastore

The Datastore is the central database for your RES ONE Workspace environment. It contains all configuration settings of User Workspaces.

All computers in your RES ONE Workspace environment connect to the Datastore directly or via a Relay Server. The Datastore is stored on a central database server that was installed prior to installing the Management Console.

You can create a Datastore that uses Federal Information Processing Standard (FIPS) compliant security algorithms. Please note that this option is only available for new RES ONE Workspace Datastores and all Management Consoles, Agents, and Relay Servers must be running on RES ONE Workspace 2015 or later.

### Relay Server

Relay Servers are an optional infrastructure component. Relay Servers cache information from the Datastore and pass it on to Agents or to other Relay Servers. Agents can be configured to contact the Datastore directly, or to use Relay Servers.

In a RES ONE Workspace site, both methods can be used at the same time, with some Agents connecting to the Datastore and others using Relay Servers. A site can contain several Relay Servers. Relay Servers increase the scalability of RES ONE Workspace in sites with many Agents, and improve performance in sites where a direct Datastore connection is slow.

Agents that connect to Relay Servers do not need to have a database driver installed for the Datastore.

### Agent

Agents are the actual computers on which a full installation or Agent-only installation of RES ONE Workspace is present locally. These can be Terminal Servers, workstations, laptops, and VDIs (Virtual Desktop Infrastructure). Agents can be configured in the Management Console.

Each Agent contains a local cache of all information that is stored in the Datastore. This setup means that a User Workspace does not depend on connectivity to the Datastore or a Relay Server. When the Agents are installed, they have to be configured to present the end users with a shell managed by RES ONE Workspace: the Workspace Composer.

## Workspace Composer

The Workspace Composer uses the data in the local data cache to build User Workspaces, including applications, menu items and settings to which the user is granted access.

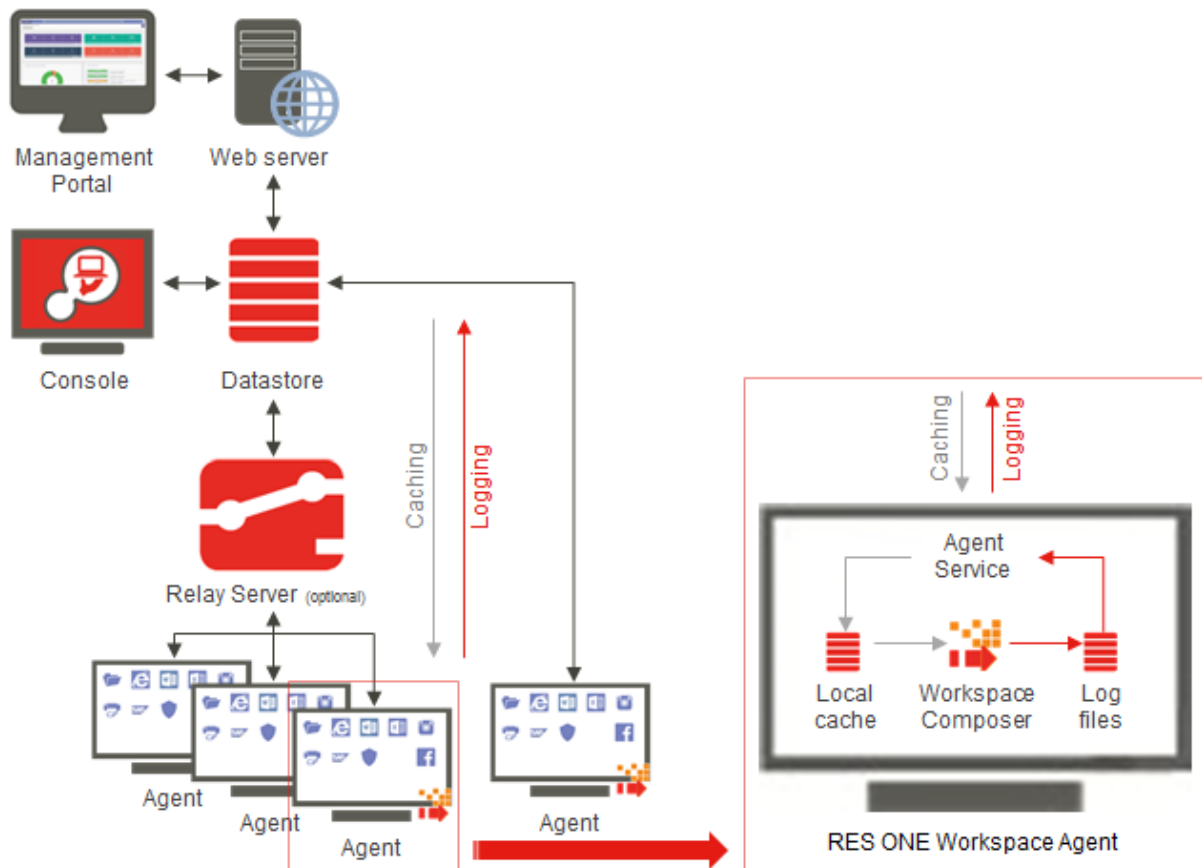
The desktop can be displayed using either the RES ONE Workspace shell or the Microsoft Windows shell. Both shells are managed by RES ONE Workspace, but the RES ONE Workspace shell presents a classic Windows-like shell with additional RES ONE Workspace-only technology, whereas the Microsoft Windows shell is the exact shell as it is presented by Microsoft, including the various available themes.

## 1.2 Workspace communication

In RES ONE Workspace, all communication between the Datastore or the Relay Server and its Agents is taken care of by the **RES ONE Workspace Agent Service**, which runs on each Agent.

- The first time a connection between an Agent and the Datastore or the Relay Server is established, for example directly after the installation of the Agent, the RES ONE Workspace Agent Service will download all configuration settings from the Datastore or the Relay Server to the local data cache on the Agent. After this, only Datastore changes will be downloaded.
- The Workspace Composer logs all actions that a user carries out in the User Workspace. Some user actions may also be recorded as Usage Tracking data. These log files and Usage Tracking data are cached locally on the Agent and are uploaded to the Datastore or the Relay Server by the RES ONE Workspace Agent Service.

RES ONE Workspace Communication



### 1.3 Module licenses in RES ONE Workspace 2016 and higher

RES ONE Workspace 2016 introduced new Module licenses. The new module licenses replace the Bronze, Silver and Gold license editions for new RES ONE Workspace sites.

Existing environments will continue to use their Bronze, Silver, or Gold licenses, and these license editions remain available for purchase when you need to increase the license count or available feature sets.

### 1.4 Licensing for initial RES Workspace Manager 2011 environments

In RES Workspace Manager 2011, the Silver Edition consisted of a fixed combination of modules: **Composition & Personalization** and **Advanced Administration**.

In RES Workspace Manager 2012 and higher/RES ONE Workspace 2015, the Silver license edition is flexible:

- **Silver (Administration)** consists of **Dynamic Configuration** plus **Delegation and Compliance**.
- **Silver (Security)** consists of **Dynamic Configuration** plus **Adaptive Security**.

At upgrade, existing RES Workspace Manager 2011 sites that use the Silver license edition will automatically keep their original combination of modules, i.e. **Silver (Advanced Administration)**.

The feature **User Installed Applications** was initially in the **Delegation and Compliance (Advanced Administration)** module, but has been moved to **Adaptive Security (Security & Performance)**. However, the feature remains available for upgraded sites using the edition **Silver (Advanced Administration)**.

### 1.5 Video tutorials

We publish video tutorials online to get you started with RES ONE Workspace quickly and easily. These tutorials cover a broad range of subjects, from installing and setting up RES ONE Workspace to configuring the various parts of our product (for example, using the Workspace Model and Managed Applications).

If a video tutorial is available about a specific feature, you can access it using the **View tutorial** button in the Console command bar. The Help file also offers hyperlinks to video tutorials.



## Chapter 2: Prerequisites

Prerequisites	
Software	<p>The <b>RES ONE Workspace Installer</b>: RES ONE Workspace Installer 10.1.0.0.exe, which is available for download at <a href="http://success.res.com">http://success.res.com</a>, and includes the RES ONE Workspace version 10.1 Upgrade Pack file:</p> <ul style="list-style-type: none"> <li>RES ONE Workspace Upgrade Pack 10.1.0.0.exe (for <i>regular</i> installation)</li> </ul> <p>For <i>unattended</i> installation, the following file is available for download at <a href="http://success.res.com">http://success.res.com</a>:</p> <ul style="list-style-type: none"> <li>RES ONE Workspace Auto Upgrade Pack 10.1.0.0.exe</li> </ul>
Hardware	<p>A full installation of RES ONE Workspace (Management Console and Agent) needs approximately 125 MB. Approximately 75 MB is needed for the installation of the Agent. This does not include the data stored in the local cache. The hard disk space required for cached data entirely depends on the configuration of your RES ONE Workspace environment.</p>
Agents	<p><b>Software</b></p> <ul style="list-style-type: none"> <li>A supported operating system. See the <b>Compatibility Matrix</b> (see page 13).</li> <li>Microsoft .NET Framework 4.5.2 or higher.</li> <li>Microsoft .NET Framework 4.5.2 Client Profile or higher when using User Setting caching.</li> </ul> <p><b>Hardware</b></p> <ul style="list-style-type: none"> <li>The memory needed for the Agent depends on the configuration. For example, in an environment with applications enabled and 100 authorized files configured, the Agent needs around 27 MB of memory during a normal user session (applications are running, other applications are started and stopped again).</li> <li>Each Agent requires drive space on the home drive for storing RES ONE Workspace settings. As User Settings are stored in the same location, this amount increases if User Settings are available to the user. The required amount of space then depends on the size of the stored User Settings. All RES ONE Workspace settings, including User Settings, are compressed when stored.</li> </ul>
Relay Server	<p>If you want to start using Relay Servers, separate prerequisites apply and separate installation files are required. For more information, please refer to the document <b>Getting Started with RES ONE Workspace Relay Servers</b>, which is available at <a href="http://success.res.com">http://success.res.com</a>.</p>

See the **Compatibility Matrix** (see page 13) for a complete overview.

## Chapter 3: Deployment

### Test it first

Before upgrading to RES ONE Workspace version 10.1 in your production environment, please make a backup and set up a test environment first. This allows you to test the upgrade procedure to RES ONE Workspace version 10.1 safely and in a controlled way.

### 3.1 Upgrade to RES ONE Workspace version 10.1

This chapter describes the upgrade procedure for RES Workspace Manager 2011 and higher to RES ONE Workspace version 10.1 and higher.

When upgrading your environment to RES ONE Workspace version 10.1, existing Agents are upgraded to the new RES ONE Workspace Agent. This Agent offers your users improved feature scalability and performance. This new RES ONE Workspace Agent version 10.1 is ready for the latest technology feature enhancements.

When upgrading, RES recommends to take the DTAP-street approach to allow a phased introduction of RES ONE Workspace version 10.1 into your production environment.

#### DTAP-street

As with any new version of RES ONE Workspace, RES recommends to test the upgrade first in a test environment, followed by an acceptance test. A test setup might be to create a pilot group with users from different departments and monitor the user experience. This allows you to test the upgrade procedure to RES ONE Workspace v10.1 safely and in a controlled way.

After successful tests, make a backup of your production environment before upgrading to RES ONE Workspace version 10.1 in that environment.

#### Production environment

1. Store the Upgrade Pack executable locally on the computer that you want to upgrade.
  - The first computer to be upgraded should be a computer running a Full or Console-only installation of RES Workspace Manager/RES ONE Workspace with a direct connection to the Datastore (i.e. not to Relay Servers).
2. Run the Upgrade Pack and follow the steps of the Upgrade Wizard.
  - When prompted whether to upgrade, click **Yes**.
  - When the upgrade has finished, click **Next**.
3. Click **Finish** .
4. Now **reboot** the computer. The reboot of the computers is a mandatory step to finish the upgrade to RES ONE Workspace version 10.1.

### Upgrade other computers

Update and reboot all other computers running RES ONE Workspace Agents. Before you can update them manually by running the Upgrade Pack, please make sure the Agent cache is in sync with the upgraded Datastore. Alternatively, you can use the RES ONE Workspace version 10.1 Auto Upgrade Pack to update Agents unattended. The reboot of the computers is a mandatory step to finish the upgrade to RES ONE Workspace version 10.1. Without a reboot, user sessions might experience problems if the Workspace Composer restarts.

Please note that before using the RES ONE Workspace version 10.1 Auto Upgrade Pack, you need to install at least one Upgrade Pack manually once. This ensures that the Datastore is correctly updated. After this first Upgrade Pack, you can use Auto Upgrade Packs for other computers.

In your production environment, it is recommended to upgrade per group of user sessions, for instance per Workspace Container based on operating system, IP range, or other zone rules.

It is possible to run RES Workspace Manager 2014 SR2/RES ONE Workspace 2015 or higher and RES ONE Workspace version 10.1 next to each other in a mixed environment.

### More information

The **Feature deprecation** (on page 21) will inform you about the features that will not be supported in a next version of RES ONE Workspace.

### Downgrade

- After you upgraded to RES ONE Workspace version 10.1, you can only downgrade to the version you upgraded from. Use the installation files from your previous RES ONE Workspace version to downgrade again.
- Initial installations of RES ONE Workspace version 10.1 cannot be downgraded to an earlier version of RES ONE Workspace. In such case, RES ONE Workspace version 10.1 must be completely uninstalled before the installation of the earlier version can be done.



#### **Warning**

When upgrading to RES ONE Workspace version 10.1 from RES Workspace Manager 2014 SR1 or lower, it is important to know that certain communication between the RES ONE Workspace Console and the Agents is not possible in mixed environments. See **Running RES ONE Workspace in a mixed environment** (on page 10) for more information.



#### **Notes**

RES ONE Workspace version 10.1 includes several enhancements and fixes that will only take effect if the Relay Servers in your site have also been upgraded.

### 3.1.1 *RES ONE Automation Integration*

In RES ONE Workspace 2015 and higher, for the integration with RES ONE Automation, the use of RES ONE Automation authentication is required. Microsoft Windows authentication is no longer supported for the integration between these two RES products.

When upgrading a RES ONE Workspace environment that integrates with RES Automation Manager using Microsoft Windows authentication, the configured Automation Tasks will continue to work as they did before the upgrade. No action is needed.

Before configuring new Automation Tasks, first create a dedicated RES ONE Automation login using RES ONE Automation authentication, and then update the RES ONE Workspace Console to reflect this (at **Setup > Integration > RES Products > RES ONE Automation**). The dedicated RES ONE Automation login must at least have read permissions on the Modules and Projects nodes in RES ONE Automation.

### 3.1.2 *RES ONE Identity Director Integration*

The RES ONE Identity Director client fully manages the RES ONE Identity Director's Self-Service Password Management functionality. Prior to RES Service Store 2015 (the predecessor of RES ONE Identity Director), self-service password management on the Microsoft Windows logon screen was controlled through RES Workspace Manager.

With this change, the option **Enable Password Reset on Windows logon screen** in RES Workspace Manager 2014 (at **Setup > Integration > RES Software > RES IT Store**) is obsolete and is, therefore, no longer available in RES ONE Workspace 2015 and higher.

If your environment runs RES IT Store 2014 (the predecessor of RES Service Store) in combination with RES Workspace Manager 2014 and the **Password Reset** option is enabled, please follow the upgrade procedure as described in the **RES ONE Identity Director Upgrade Guide** to maintain Self-Service Password Management functionality on the Windows logon screen.

If the **Password Reset** option is enabled and you upgrade to RES ONE Workspace 2015 or higher, during a manual upgrade, a warning will be displayed indicating that the functionality will be disabled. The administrator then has the possibility to cancel the upgrade. During an unattended installation, the option will automatically be disabled.

### 3.1.3 *User Homedrives*

Once all Agents in your environment have been updated to RES ONE Workspace version 10.0.200.0 or higher, any `pwruser_<MACHINENAME>.his` files can be removed from the users' homedrive. Previously, RES ONE Workspace generated multiple `pwruser_<MACHINENAME>.his` files for users that logged in to different machines. Now, only one `pwruser.his` file is created and maintained per user.

### 3.2 Running RES ONE Workspace in a mixed environment

Running RES Workspace Manager 2014 SR1 (or lower) and RES Workspace Manager 2014 SR2 or higher/RES ONE Workspace 2015 or higher next to each other in a mixed environment, will cause certain communication between the RES ONE Workspace Console and the Agent not to be possible. Specifically, this means the following:

- In mixed RES Workspace Manager 2014 SR1 (and earlier) and RES Workspace Manager 2014 SR2 and higher/RES ONE Workspace 2015 and higher environments the following is not possible:
  - executing a forced cache update from the Console on the Agent (at **Diagnostics > Agents Overview** or **Administration > Agents**, right-click the agent and select the option **Force Cache Update**).



- using User Sessions Security (SessionGuard; at **Security > User Sessions**) to end or disconnect already active sessions if only one active session is allowed at a time. The user sessions will be detected by the Workspace Composer, but ending or disconnecting the other active session cannot be executed if the user sessions each run a different version of RES Workspace Manager/RES ONE Workspace.



#### Notes

- When downgrading from RES Workspace Manager 2014 SR2 (or higher)/RES ONE Workspace 2015 (or higher) to RES Workspace Manager 2014 SR1 (or lower), it is essential that all user sessions are logged off at that time.
- During the upgrade from RES Workspace Manager 2014 SR1 (or lower) to RES Workspace Manager 2014 SR2 (or higher)/RES ONE Workspace 2015 (or higher), user sessions may be active.

### 3.3 Use FIPS compliant security algorithms

RES ONE Workspace 2015 introduced the possibility to force the use of only Federal Information Processing Standard (FIPS) compliant security algorithms for cryptography and digital certificate handling. FIPS compliant mode does not rule out support for legacy MD5 file hashes used for checking file integrity in non-exposed areas of the product.

The option to configure a RES ONE Workspace environment to only use FIPS compliant security algorithms, is only available for *new* RES ONE Workspace Datastores and all Management Consoles, Agents, and Relay Servers must be running on RES ONE Workspace 2015 or higher.

If you have an existing environment and want to start using only FIPS compliant security algorithms, you have to create a new Datastore and make sure *all* components are running RES ONE Workspace 2015 or higher. You can use Building Blocks from your previous RES ONE Workspace environment to fill your new Datastore.

With Building Blocks, take the following scenarios into consideration:

Building Block created in version	Building Block imported in version
RES Workspace Manager 2014 SR3 or lower	RES ONE Workspace 2015 (or higher) FIPS enabled <ul style="list-style-type: none"> <li>User Installed Applications are not imported if they contain MD5 file hashes.</li> </ul>
RES Workspace Manager 2014 SR3 or lower	RES ONE Workspace 2015 (or higher) FIPS not enabled <ul style="list-style-type: none"> <li>All objects are imported</li> </ul>
RES ONE Workspace 2015 (or higher) FIPS not enabled	RES ONE Workspace 2015 (or higher) FIPS enabled <ul style="list-style-type: none"> <li>All object are imported</li> </ul>
RES ONE Workspace 2015 (or higher) FIPS not enabled	RES ONE Workspace 2015 (or higher) FIPS not enabled <ul style="list-style-type: none"> <li>All objects are imported</li> </ul>
RES ONE Workspace 2015 (or higher) FIPS enabled	RES ONE Workspace 2015 (or higher) FIPS enabled <ul style="list-style-type: none"> <li>All objects are imported</li> </ul>
RES ONE Workspace 2015 (or higher) FIPS enabled	RES ONE Workspace 2015 (or higher) FIPS not enabled <ul style="list-style-type: none"> <li>Building Block cannot be imported (RES ONE Workspace cannot read the Building Block)</li> </ul>

If you downgrade from RES ONE Workspace 2015 (or higher) to RES Workspace Manager 2014 SR3 or lower, please note that User Installed Applications from a Building Block are imported, but the checksum of file hashes cannot be used, because SHA-256 encryption is unknown in this lower product version.

#### Building Block password protected

When creating a Building Block in a RES ONE Workspace 2015 (or higher) environment with FIPS enabled, a password must be specified. When importing this Building Block via the Management Console, this password must be specified again (plain text). When importing this Building Block via a command line, i.e. `/passwordfips`, the hash of this password must be specified. RES ONE Workspace 2015 (or higher) Building Blocks with FIPS enabled can only be imported one by one.

## Chapter 4: Where to go from here?

For information about all functionality of RES ONE Workspace, please refer to the **Help**, which is available after installing the RES ONE Workspace Console, by pressing **F1**.

For in-depth information, please refer to the **RES ONE Workspace Administration Guide**.

## Chapter 5: Compatibility Matrix RES ONE Workspace version 10.1

Products marked with an asterisk (\*) are scheduled to be removed in a next version of RES ONE Workspace. RES Software will give “Best Effort” Support for these products. “Best Effort” Support means that if something used to work correctly and stopped working, RES will try to make it work as before. This does not mean that RES Software will add new functionality for these products or provide support for these products.

Irrespective of this compatibility matrix, RES does not support versions of products for which End of Life (EOL) has been declared by their respective vendors.

### 5.1 Compatibility for basic installation

#### 5.1.1 Supported Microsoft Windows operating systems

Windows Server version	Edition
Windows Server 2016	Datacenter
	Standard
	Essentials
Windows Server 2012 R2	Datacenter
	Standard
	Essentials
	Foundation
Windows Server 2012	Datacenter
	Standard
	Essentials
	Foundation
Windows Server 2008 R2	Datacenter
	Enterprise
	Standard
	Web Edition



Windows version	Edition
Windows 10 v1703 (Build 10.0.15063)	Enterprise
	Pro
	Education
Windows 10 v1607 (Build 10.0.14393)	Enterprise
	Enterprise LTSB
	Pro
	Education
Windows 10 v1511 (Build 10.0.10586)	Enterprise
	Pro
	Education
Windows 10 v1507 (Build 10.0.10240)	Enterprise
	Enterprise LTSB
	Pro
	Education
Windows 8.1	Enterprise
	Pro
Windows 8	Enterprise
	Pro
Windows 7 SP1	Enterprise
	Professional
	Ultimate

### 5.1.2 Supported Database systems

Database type	Version
Microsoft SQL	2016 SP1
	2016
	2014
	2012
	2008 R2
	2008
	2005
Microsoft SQL Azure	
MySQL	5.x
Oracle	11.x
IBM DB2*	

Products marked with an asterisk (\*) are scheduled to be removed in a next version of RES ONE Workspace. See also Feature deprecation (on page 21).

### 5.1.3 Supported Directory Services

Directory Service	Version
Microsoft Active Directory	Functional level: 2016
	Functional level: 2012 R2
	Functional level: 2012
	Functional level: 2008 R2
	Functional level: 2008
	Functional level: 2003
	Functional level: 2000
Microsoft Windows NT Domains*	

Products marked with an asterisk (\*) are scheduled to be removed in a next version of RES ONE Workspace. See also Feature deprecation (on page 21).

## 5.2 Compatibility with third-party software

### 5.2.1 Supported Citrix products

Citrix product	Version
XenApp	7.14 - the <a href="#">Citrix XenApp/XenDesktop Remote PowerShell SDK</a> needs to be downloaded for publishing from RES ONE Workspace to work (also see <a href="#">this support article</a> ).
	7.13 - the <a href="#">Citrix XenApp/XenDesktop Remote PowerShell SDK</a> needs to be downloaded for publishing from RES ONE Workspace to work (also see <a href="#">this support article</a> ).
	7.12
	7.11
	7.9
	7.8
	7.7
	7.6 FP3
	7.6 FP2
	7.6 FP1
	7.6
	7.5
	7.1 (XenDesktop 7.1 App Edition)
	7.0 (XenDesktop 7.0 App Edition)
	6.5 FP2
	6.5 FP1
6.5	
XenDesktop	7.14 - the <a href="#">Citrix XenApp/XenDesktop Remote PowerShell SDK</a> needs to be downloaded for publishing from RES ONE Workspace to work (also see <a href="#">this support article</a> ).
	7.13 - the <a href="#">Citrix XenApp/XenDesktop Remote PowerShell SDK</a> needs to be downloaded for publishing from RES ONE Workspace to work (also see <a href="#">this support article</a> ).
	7.12
	7.11
	7.9
	7.8
	7.7
	7.6 FP3
	7.6 FP2
	7.6 FP1
	7.6

Citrix product	Version
XenDesktop	7.6
	7.5
	7.1
	7.0
Receiver	4.7
	4.6
	4.5
	4.4
	4.3
	4.2
	4.1
	4.0
Citrix App Layering	4.2 - RES ONE Workspace installed in the OS layer
	4.1 - RES ONE Workspace installed in the OS layer

### 5.2.2 Supported LANDESK products

LANDESK Product	Version
LANDESK Management and Security Suite	9.5 SP1
	9.5

### 5.2.3 Supported Microsoft products

Application Virtualization	Version
App-V 5.x	5.1
	5.0 SP3
App-V 4.x*	4.6 SP3
	4.5 SP2

Provisioning Services	Version
Microsoft System Center	Configuration Manager 2016 v1702
	Configuration Manager 2016 v1610
	Configuration Manager 2016 v1606
	Configuration Manager 2016 v1602
	Configuration Manager 2016 v1511
	Configuration Manager 2012 R2 SP1
	Configuration Manager 2012 R2
	Configuration Manager 2012 SP2
	Configuration Manager 2012 SP1

Products marked with an asterisk (\*) are scheduled to be removed in a next version of RES ONE Workspace. See also *Feature deprecation* (on page 21).

For supported Microsoft browsers, see **Supported browsers for Website Security** (on page 20)  
 For supported Microsoft mail systems, see **Supported systems for E-mail Settings** (on page 20)

### 5.2.4 Supported VMware products

VMware product	Version	Limitations
Horizon / View	Horizon 7.x	Except for the RES ONE Workspace feature Remote Assistance
	Horizon 6.x	Except for the RES ONE Workspace feature Remote Assistance
	View 5.x	Except for the RES ONE Workspace feature Remote Assistance
Horizon / View Client	Horizon Client 4.4	
	Horizon Client 4.3	
	Horizon Client 4.2	
	Horizon Client 4.1	
	Horizon Client 4.0	
	Horizon Client 3.x	
	Horizon View Client 2.3	
	Horizon View Client 5.4	
ThinApp	5.x	
	4.7.3	
App Volumes	2.9-2.x	

### 5.2.5 Supported browsers for Website Security

Browser	Version
Google Chrome	39 or higher
Microsoft Edge	Present in supported Microsoft Windows versions
Microsoft Internet Explorer	9
	10
	11
Mozilla Firefox	38 or higher
Opera	29 or higher

### 5.2.6 Supported systems for E-mail Settings

Application	Version
Microsoft Exchange	Online (Office 365)
	Server 5.5 or higher
Microsoft LDAP Directory	
Microsoft Office	365
	2016
	2013
	2010
HP OpenMail*	
IMAP (Outlook XP only)*	
Internet E-mail*	
Lotus Notes Mail*	
Microsoft Mail*	
Microsoft Outlook Express*	
Nortel CallPilot*	
Oracle Connector for Outlook*	
Zarafa Groupware Server*	7.x
	6.x

Products marked with an asterisk (\*) are scheduled to be removed in a next version of RES ONE Workspace. See also Feature deprecation (on page 21).

## Chapter 6: Feature deprecation

In a next version of **RES ONE Workspace**, the following features are no longer supported. Most of these features have already been removed. The remaining features on this list are scheduled to be removed from the product in a next release.

✔ = Supported

✔\*\* = Available, not supported

⊘ = Removed, end of support

Product Name / Feature	RES ONE Workspace			
	2015*	2016*	v10	v10.1
Microsoft Windows XP	✔**	✔**	⊘	⊘
Microsoft Windows Vista	✔**	✔**	⊘	⊘
Microsoft Server 2003	✔**	✔**	⊘	⊘
Microsoft Server 2008	✔**	✔**	⊘	⊘
Microsoft SCCM 2007 SP2	✔**	✔**	✔**	✔**
Microsoft SCCM 2007 R3	✔	✔**	✔**	✔**
Microsoft Windows NT Domains	✔	✔	✔**	✔**
Microsoft App-V 4.x	✔	✔	✔**	✔**
Novell Directory Services	✔	✔	✔**	⊘
Citrix XenApp 6.0	✔**	✔**	⊘	⊘
Citrix XenDesktop/XenApp 5.x	✔**	✔**	⊘	⊘
Citrix Presentation Server (all)	✔**	✔**	⊘	⊘
Citrix Application Streaming	✔**	✔**	⊘	⊘
RES HyperDrive	✔**	✔**	⊘	⊘
E-mail Setting: HP OpenMail	✔	✔	✔**	✔**



Product Name / Feature	RES ONE Workspace			
	2015*	2016*	v10	v10.1
E-mail Setting: IMAP (Outlook XP only)	✓	✓	✓**	✓**
E-mail Setting: Internet Mail	✓	✓	✓**	✓**
E-mail Setting: Lotus Notes Mail	✓	✓	✓**	✓**
E-mail Setting: Microsoft Mail	✓	✓	✓**	✓**
E-mail Setting: Microsoft Outlook Express	✓	✓	✓**	✓**
E-mail Setting: Nortel CallPilot	✓	✓	✓**	✓**
E-mail Setting: Oracle Connector for Outlook	✓	✓	✓**	✓**
E-mail Setting: Zarafa Groupware Server	✓	✓	✓**	✓**
IBM DB2	✓**	✓**	✓**	✓**

\*Note: The referenced RES ONE Workspace 2015 and RES ONE Workspace 2016 includes all 'Service Releases', 'Feature Packs' and 'Minor' releases.

\*\*\*"Best Effort" Support: "Best Effort" means that if something used to work correctly and stopped working, RES Software will try to make it work as before. This does not mean that RES Software will add new functionality to unsupported products or provide support for unsupported products (the 3rd party product was not supported in the major release).

## Chapter 7: RES Support

At RES, our core business is to help heighten productivity in your organization. RES Support helps us to achieve this goal, and has been embedded in the core principles of our company since it was founded. RES is dedicated to supporting everyone who uses or wants to use its proven products with RES Support, which elevates our enterprise solutions above and beyond technology.

**Support** - If you are experiencing difficulties with any of our products, you may find the solution in our Knowledge Base (**Success Center > Support**) or you can contact RES Support directly (**Success Center > Click Contact Us**).

**Product Upgrades and Service Releases** - To upgrade your version of RES ONE Workspace to the latest standard, you can install Product Upgrade Packs from <http://www.res.com> and Service Releases from the **Success Center > Downloads**. The supporting documentation consist of Online Help (available via F1 in the Console), Release Notes and Administration Guide (**Success Center > Downloads**).

**Solution Assurance** - To protect your investment, it is mandatory that you purchase one initial year of Solution Assurance with each license purchase. Solution Assurance unlocks access to Technical Support, Product Updates and Upgrades and the Knowledge Base. Solution Assurance is extended automatically, unless you specify otherwise.

**Early Adopter Program** - Participants of the Early Adopter Program are actively involved in taking RES solutions to the next level. The Early Adopter Program unlocks access to interim releases of our products. These releases are production-ready and allow you to test drive and explore new functionality.

**RES Community** - RES invites you to become part of our community to share best practices and tips with fellow IT professionals, find solutions and more (**Success Center > Q&A**).

Please visit the **RES Success Center** (<http://success.res.com>) for more information on **Support**.

## Chapter 8: RES Training

RES has developed a mix of learning materials to help our customers and channel partners get the most out of our products. Our goal is to give you a choice in how you learn; whether that is in the classroom, online tutorials and virtual workshops, or downloading our self-study kits. Please visit the Academy at RES Success Center (<http://success.res.com>) or go to <http://res.com/support/training> to find more information on Training.

**RES Academy** - RES Academy provides an engaging way to learn about RES products and technologies. It consists of short video tutorials, including practice questions, informative links and more. These tutorials cover a broad range of subjects: from planning, installing and configuring an environment to using the functionality of the RES product.

**Workshops** - For customers and partners RES organizes free interactive online workshops. These one-hour events are intended for experienced users of our software and deal with specific use cases and troubleshooting. Due to the interactive nature of these workshops, the number of seats per session is limited.

**Training Classes** - For partners and customers, RES has developed several technical courses that deal with the installation and configuration of RES ONE Workspace, RES ONE Automation and RES ONE Identity Director. These technical courses are offered by RES Authorized Learning Centers (RALCs).

**RES Certification** - RES offers a certification program designed to validate IT professionals with the technical capabilities and expertise needed to effectively use the RES product portfolio, giving companies the confidence that their IT employees have the skills and experience needed to be successful.