

Release Notes

Accops HyWorks v3.2-GA Release

Last Updated: 15 November 2018

Accops HyWorks v3.2-GA Release Notes

Copyright © 2018, Accops Systems Private Limited. All Rights Reserved.

The information contained in this document represents the current view of Accops Systems Private Limited. on the issues discussed as of the date of publication. Because Accops Systems Private Limited. must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Accops Systems Private Limited., and Accops Systems Private Limited. cannot guarantee the accuracy of any information presented after the date of publication.

This white paper is for informational purposes only. ACCOPS SYSTEM PRIVATE LIMITED. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) or for any purpose, without the express written permission of Accops Systems Private Limited.

Contact Accops Systems Private Limited.

Email: info@accops.com
Call: +91 9595 277 001

Release Notes Document Revision History

Date	Changes
15-July-2018	V3.2-RC6 Release Notes draft document
02-Sept-2018	V3.2-RC9 Release Notes incorporation started
10-Oct-2018	V3.2-GA Release notes details added
15-Nov-2018	Details of Patch to resolve upgrade over GA added
27-Nov-2018	Details of Hotfix-1 and Session Server extension 3.0.6.7 added

Table of Contents

Table of Contents	3
Introduction	7
HyWorks Components being Released in HyWorks V3.2-GA	7
Client Releases	9
Other Modules (Released in v3.2-GA)	10
Important for Installation, Upgrade or HyWorks Deployments	12
Setup Dependency on .Net 4.7.2	12
HyWorks Controller Versions Supporting Upgrade	12
HyWorks Components Compatibility	12
Details of HyWorks v3.2-GA Release	14
Prerequisite .Net 4.7.2 is must for HyWorks Servers	14
Support for Windows 2008R2 Deprecated	14
Supported Windows Servers	14
Changes in HyWorks v3.2-Hotfix1	15
HyWorks Patcher v3.2-HF1	15
Accops Session Server Extension v3.0.6.7	15
HyWorks Controller: New Features and Enhancements in v3.2-GA	16
Naming Conventions Changes in Desktop Pools	16
Restricting Desktop Pool or Reservation Access using Client Groups	17
Ability to Sign-out Unauthorized Direct RDP connections	17
Option to Remove Desktop from Hypervisor	18
Improved Support for SMTP Configurations with SSL/TLS and StartTLS	18
Reservation Management System	19
Linux based Virtual Desktops and Applications Delivery	20
Support for Nutanix AHV and Prism Central	20
Named User Licensing	21
User Details	21
License Sharing	21
Shared Hosted Desktop Customization Using HyShell	21
Option to Assign Dedicated Desktops 'On Login' or 'On Connect'	22
Announcements	22
Asynchronous Provisioning with VMware vCenter Server	22
Enhanced Support for SCVMM2016	23

Enhanced Flow for Non-persistent desktops	23
Multiple Sessions with Single User Support	23
Reconnection between Windows and HyDesk/Linux Clients	24
Global Option to stop pushing date changes on HyDesk Endpoints	24
Option to Configure SQL Server for Logging	24
Option to ignore user activity, once sessions are disconnected	24
Enhancements to enable Session Host Server creation using Provisioning	24
Escape Character Definition in Additional Command Line Attribute to Support Co Command Line	
User Session and Application Access Monitoring Logs	25
HyWorks Clients: Features and Enhancements	26
MAC OS Client Release: v312093	26
SEP support for RDP10 (HyDesk Hy4000/Hy3000/Linux Client)	26
Improved Auto-logout with option to Sign-out or disconnect the session	26
Connection through HySecure Mode	26
Power Operations support	27
Option to Open Log Files on Client side	27
HyWorks Client for Windows	27
Accops Session Server Extensions: New Features and Enhancements	30
HyPrint PDF Printing Support for Linux SHD and Desktops VMs	30
HyFR Integrations	30
HyWorks v3.2-GA Important Bug Fixes	31
Using attached ISO datastore for Cloning	31
Enhancement in Host Selection Logic while cloning	31
Unable to detect Folder object of type Hosts in VMware deployments	31
Sysprep is running again on provisioned desktops after desktop tools upgrade or and reinstallation	
Controller creating multiple user sessions, when user signing-in with different cre	
DVM Agent will avoid upgrade if Sysprep is enabled	31
HyWorks Controller/ Session Host Server setup fails to install, if Windows Firewall running	
Known Issues – Accops HyWorks V3.2	33
Known Issues - HyWorks	33
Controller Configuration and Installer Issues	33

User Details	32
SCVMM Provisioning	34
Authentication Server and Authentication Domain	34
Logs Management	35
Licensing	36
Session Management	36
Application Delivery	37
HyShell	37
HyWorks Controller Management Console Browser Compatibility	37
Entitlements	37
Remote Control Advanced Configurations	38
User Synchronization, Built-In Directory and CSV Import	38
Organizations	38
Connection Profiles	38
Session Providers	38
HyWorks Controller Cluster	39
Dedicated VDI and Provisioning Issues	40
Application and Shared Desktop Delivery	41
Back-Up Restore	41
SMTP Configurations	42
USB Redirection	42
Special Characters Support	42
Management Console UI Issues	43
File Redirection and Session Server Extensions	43
Known Issues - RMS	43
Announcements	44
Courses	44
Gold Master	44
Provisioning and Cloning	44
CSV Settings and Import Known Issue	44
Deployment Settings	45
USB Redirection using Eltima/SEP	45
E-mail Notifications	45
Provisioning Profiles	46

Reservations	46
RMS – Portal and Browser	48
USB Redirection – RMS – Known Issues	48
Known Issues - Linux VDI	49
Known Issues – Linux SHD	49
Known Issues Endpoints	51
HyLite – HyWorks Integration	51
Common Known Issues (Platform Independent)	52
Windows Client and Hy3020	52
HyWorks Client connecting though HySecure Gateway	53
HyDesk (Hy3000/ Hy4000/ Hy3020/Hy2000) Known Issues	53
HyDesk Hy2000 – v256228	54
HySecure Client + HyWorks Client (HySecure in front)	55
HyWorks Client for MAC OS	55
HyWorks User Portal	
Support	56

Introduction

This release notes document is being published to provide following details:

- 1. Information of HyWorks modules being released and download links
- 2. New features and enhancements delivered with v3.2 in HyWorks Controller, clients and other modules
- 3. Important bug fixes
- 4. Known limitations and issues in HyWorks v3.2-GA release

HyWorks Components being Released in HyWorks V3.2-GA

In this section of the document, details of different HyWorks Module are being provided, which are being delivered as part of HyWorks v3.2-GA release:

Important Notes:

- 1. .Net 4.7.2 is required for Controller or Session Host Server installation
 - a. Support for Windows 2008R2 is deprecated and Windows 2008R2 must be upgraded to SP1 before installing HyWorks Controller or Session Host Server.
- 2. While upgrading over v3.0, the additional hotfix patch must be installed. The hotfix patch is having some additional bug fixes as well, refer section Changes in HyWorks v3.2-Hotfix1
- 3. HyWorks v3.2-GA controller must use Hyper-V Connector v3.0.0.30 or later for SCVMM or Hyper-V servers.
- 4. Linux SHD is supported with HyWorks Controller v3.2-GA/RC9 only.

Module	Version	Remarks	Download location
HyWorks Controller	v3.2.0.8584	Integrated setup consists of: • HyWorks Controller • Management Console/ User Workspace Portal/ RMS Console • All Client Setups • HyWorks Session Host Agent • HyWorks DVM Tools	Download HyWorks Controller v8584 MD5: 35d3c6b01cb41587ca116 a2b1655cb3c
HyWorks Controller and Session Host Patch	No versioning – Tagged as Hotfix-1	 On setups upgraded from 3.0 servers. Session Host Servers (HyShell Issue with roaming profiles and admin not having permissions on user's desktop 	Download HyWorks Patch for Upgrade Over 3.0 MD5: 375f674802c16a49774310 a9413d34a2

HyWorks Session Host Server	V3.2.0.8584	For explicit installation of HyWorks Session Host Server on Windows Servers	Download HyWorks Session Host Server v8584 MD5: 1d006b0d1e164833e613f 9b5333da0c8
HyWorks DVM Tools – Windows	v3.2.2.22	For enabling Windows Desktops to be served in HyWorks. Latest version is available from Downloads in HyWorks Controller or as an upgrade.	Direct Download Link for Windows DVM Tools MD5: 4139cee7ffe49c19455dd4 02d60b6c13
HyWorks DVM Tools -Linux	V3.2.2.19	RMS Integration + Application Logging Support Same DVM Tools installer can be used to be installed on both platforms (Ubuntu and CentOS)	Direct Download Link for Linux DVM Tools MD5: 033c28bb027e235518cefa b6243ae26b
Offline Package for Ubuntu VDI/SHD	V04102018	Packages contains all prerequisites package installation for Linux SHD v1.5.x9 Linux DVM – Ubuntu Gnome Desktopv16.04.3	Download Link for Offline Package Dated 0410 for Ubuntu MD5: 89b4afb490ac753b28bbd 48cb47bcbc7
Linux SHD OS Package (ISO)	V1.6	 Base OS image for Linux SHD. Base OS: v16.04.4 xRDP: 0.9.7 Offline package (0410) Linux DVM Tools v3.2.2.19 	Linux SHD ISO v1.6 Download Link MD5: 3e93946fac26d8868fc7c7 b552ca2fab
Offline Package for CentOS	V04102018	Packages contains all prerequisites package installation for Linux DVM – CentOS Gnome Desktop v7-1708	Download Link for CentOS offline packages Dated 0410 MD5: f5a6bcafcfca0597dbc45b5 285639833
Hyper-V Connector	3.0.0.32	Single connector for Hyper-V 2012R2/Hyper-V 2016/SCVMM2012R2/SCVMM2016	Download Link for Hyper-V/SCVMM – GUI MD5: 662be31182023bc2ee301 e2ec2be2c13 Download Link for Hyper-V - Core MD5: 29fe96cf0f7299e7d0e4b0c c1fc5ddea

Client Releases

Module	Version	Remarks	Download location
HyWorks Client for Windows/HyDe sk 3020	v313002	Upgrade package integrated with HyWorks Controller For fresh or independent installation use the download links For upgrading existing HyWorks Clients – Upgrade patches are embedded in HyWorks Controller v3.2-GA setup	On-Demand Client Download Link MD5: ca60eb353d5445bac4cdd5bc1c7 ff55f HyWorks Client with Built-In USB Redirection Driver MD5: 27f79d3bf35b06de73f8a9617c5 91614 HyWorks Client with Built-in and Enhanced USB Redirection Driver MD5: bc2592cdb2ebfc7d76dd0ab4f64 91803
HyWorks Client for MAC	v312093	MAC Client setup zipped files	Download HyWorks Client for MAC OS MD5: 70cd35199c094468c4209fd515a 6ffb7
HyWorks Client GA-base package for xUbuntu 16.04- x86	v312085	The installer is having all dependency packages and should be installed on fresh setup of xUbuntu 16.04-86 Note: Read installation manuals	Download HyWorks Client for xUbuntu16.04-x86 MD5: 30cc6ed19293151ea7a87413903 3a953
HyWorks Client - GA-base package for xUbuntu 16.04- x64	v312085	This will setup the base package and client on xUbuntu 16.04-x64 machines.	Download HyWorks Client Offline Package for xUbuntu 16.04-x64 MD5: d81918bb7198b78e2628b719da fe0810
Accops HyOS for PCs	v0.8.3	Customized Ubuntu OS for converting existing user PCs (Laptops/Desktops) to Thinclients	Accops HyOS-x86 v0.8.3 ISO Download Link MD5: ef94b80b5a01af31b0f39ade6b8 107ef

		Having more than one display ports (one VGA and HDMI etc.)	
Accops HyOS	V0.8.4	Customized Ubuntu OS for	Accops HyOS-x86 v0.8.4 ISO
for PCs		 VXL and other 	<u>Download Link</u>
		terminals running	MD5:
		with single VGA	2f45c08386bd67e4a3761eca387
			e4322

Other Modules (Released in v3.2-GA)

Module	Version	Remarks	Download location
HyDesk Hy3000/Hy4000 Upgrade Patch	v312080	For upgrading HyWorks Client to GA version.	For HyWorks Controller running GA, independent upgrade patch is not needed and delivered embedded with HyWorks Controller. For independent upgrade package: Download from Here MD5: 2e5181d55792a2b190355d226cfc9f71
HyWorks Client Upgrade Patch for xUbuntu/Accops HyOS	V312085	For upgrading existing HyWorks Client running on xUbuntu/Accops HyOS	For HyWorks Controller running GA, independent upgrade patch is not needed and delivered embedded with HyWorks Controller. For independent upgrade package: Download from Here MD5: 580cbe761f212093fe9c1a35b95ee77c
Accops Session Server Extensions	V3.2-GA [v3.0.6.6] Post GA Released v3.0.6.7	Component required for HyPrint PDF Printing and File Redirection	 HyWorks v3.2-GA modules (Session Host Server and DVM Tools are having session server extension v3.0.6.6) Download Link for v3.0.6.7 (Server (DVM/Shared Session Host) module) MD5: bbd80d2c1d9613aac201613350deadb2
Accops File Redirection	v3.0.2.0	Component required for controlled file transfer from remote servers	No independent installation • Client module Integrated with HyWorks Clients

Accops Built-in USB Redirection Driver	8.0.1828	Required for USB redirection within Accops sessions	Server modules is delivered integrated with HyWorks DVM Tools and HyWorks Shared Session Host No independent installation required Client and server modules are delivered integrated
JC.		•	respectively with HyWorks Clients or HyWorks DVM Tools
Accops Enhanced USB Redirection Drivers	4.07	Recommended USB Redirection drivers for Shared Session Host environments • Client-side module is delivered integrated with HyWorks Clients (For Windows – Use setups with SEP) • Server-side modules must be downloaded and installed manually. Refer download link section.	Download Link for all SEP Modules MD5: e6c4c21368bd414d8f0725c556f67e97

Important for Installation, Upgrade or HyWorks Deployments

Setup Dependency on .Net 4.7.2

HyWorks Controller or Session Host Server v3.2 requires .Net 4.7.2

- Before upgrading any existing installation, make sure to install .Net 4.7.2 externally
- Support for Windows 2008R2 is deprecated:
 - .Net 4.7.2 is not supported on Windows 2008R2 (Minimum supported: Windows 2008R2-SP1)
 - Before installation or upgrade in environments running Windows 2008R2, first upgrade the OS to SP1

HyWorks Controller Versions Supporting Upgrade: HyWorks V3.2 (Controller or Session Host Server) is *upgrade compatible* with only below specified HyWorks Controller or Session Host Server Versions:

- HyWorks Controller v2.5-SP1/SP2 or later installed with SQL Server
- Upgrade over v3.0 or older versions, causes following issues:
 - o Desktop pools can not be modified and clicking on Edit button does not work
 - Assignment from desktop pools are not working

Resolution: A separate patch has been released, which must be executed on setups upgrade from v3.0 or older. Please refer section <a href="https://example.com/hyworks-com/h

Note:

- ➤ HyWorks v3.2-GA is not upgrade compatible with any previous versions of skyControl Server.
- HyWorks v3.2-GA is not direct upgrade compatible with any previous versions of HyWorks Controller running with Embedded database.
 - Upgrade wizard does not support migration from Embedded Log database to SQL and thus the changes must be done manually.

HyWorks Components Compatibility

HyWorks v3.2-GA is a major release, having some known mandatory limitations, which must be taken care of while deploying HyWorks v3.2-GA:

- Modules supported with HyWorks v3.2-GA Controller Only
 - o Linux dedicated virtual Desktops, shared hosted desktops or shell apps
 - HyWorks Clients for MAC
 - Latest DVM Tools v3.2.2.22
- Other dependencies
 - Linux SHD/Shell Apps via HyLite: HySecure Server v5200
 - o Linux SHD via HyWorks Windows Clients: HyWorks v3.2-GA
 - Hyper-V Connector v3.0.0030 or greater for HyWorks Controller v3.2-GA

• **HyWorks Session Host Server v3.2-GA and v3.2-Controller**: For facilitating all recent features and enhancements, controller and session host server both should run the GA version only.

Details of HyWorks v3.2-GA Release

HyWorks v3.2-GA consists of following changes:

Prerequisite .Net 4.7.2 is must for HyWorks Servers

Windows servers to be configured with HyWorks Controller or Session Host Server must be installed with .Net 4.7.2.

Support for Windows 2008R2 Deprecated

As .Net 4.7.2 is **not** supported on Windows 2008R2, thus existing or new installation must upgrade Windows 2008R2 to Windows 2008R2-SP1

Supported Windows Servers

Requires ex

- Windows 2008R2-SP1
- Windows 2012R2
- Windows 2016

Changes in HyWorks v3.2-Hotfix1

HyWorks Patcher v3.2-HF1

An immediate hotfix tagged as **HyWorks_Patcher-v3.2-HF1_20181127**, is released with HyWorks v3.2-GA, having important bug-fixes:

- 1. Upgrade over v3.0 or older versions, causes following issues:
 - a. Desktop pools cannot be modified and clicking on Edit button does not work
 - b. Assignment from desktop pools are not working

Resolution: A separate patch has been released, which must be executed on setups upgraded from v3.0 or older. Please refer section <a href="https://example.com/hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Released in Hyworks-being-Bein

- 2. Controller is sending incorrect Connection Type parameter for **LAN** connection type (Expected value: Connection Type:i:6, Actual value: Connection Type:i:5) The issue is fixed in hotfix1 patch.
- 3. [Bug# 4969] Unable to reconnect SHD sessions from Hy2000 devices. The issue is fixed using hotfix1 patch.
- 4. Enhancement: CPU utilization throttling and optimization. Earlier with too many desktop pools and desktop VMs, controller service was causing spike in CPU utilization. Optimization in hotfix1 patch will help in reducing CPU consumption spikes.
- 5. [Bug# 5023] Course self-study reservation converted to course reservation on csv import
- HW-1285 Active Directory: Exception during while login "multiple principal contains matching identity"
- [Bug# 5020] RMS Changing CSV Import Configuration from Hourly to Daily makes "Time" and "Next Processing Schedule" as null resulting in inaccessible CSV Configurations and Dashboard Window in RMS Portal
- 8. [Bug# -] Multiple replica are created simultaneously from single Gold master.
- 9. Enhancement: During recompose DVMs can be shutdown instead of Power Off (Default operation). The configuration is controlled from Management Console System Advanced Settings
- 10. New Feature: Virtual IP support in HyWorks Controller cluster. It's a new feature and will not be available by default. Please contact Accops Support Team for any queries or requirement of this feature.

Accops Session Server Extension v3.0.6.7

A newer version of session server extension v3.0.6.7 is released separately consists of following issue fix:

- Unable to upload files using Accops File Redirection module on network shared locations.
 - o The issue is fixed in Session Server Extension v3.0.6.7.

To download Accops Session Server Extension, refer section <u>HyWorks Components being Released in HyWorks V3.2-GA</u>

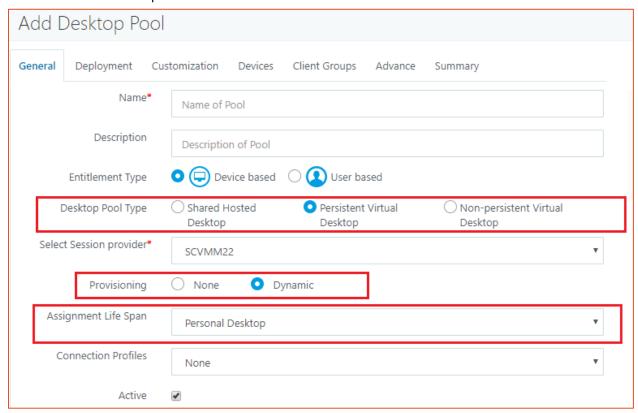
HyWorks Controller: New Features and Enhancements in v3.2-GA

Below mentioned features and enhancements are being delivered in v3.2-GA:

Naming Conventions Changes in Desktop Pools

Multiple naming conventions changes have been done in Desktops pools to make it more meaningful and relevant to usage:

- 1. Desktop Virtualization Type is renamed as Desktop Type
 - a. Disk/DVM Persistence option is now included in **Desktop Type** settings
 - Available options are: Shared Hosted Desktop, Persistent Virtual Desktop, Non-persistent Virtual Desktop
- 2. Desktop Provisioning is renamed as Provisioning
- 3. Assignment Life Span:
 - a. Option Temporary named as *Floating*
 - b. Option Permanent named as *Personal*
 - c. Option On-demand is moved to Desktop Pool Advanced Configurations screen under the setting **Assign Desktop**
 - i. Assign Desktop On login will function as previous temporary desktop pools
 - ii. Assign Desktop On connect will function as previous On-demand desktop pools



Restricting Desktop Pool or Reservation Access using Client Groups

Client groups feature was introduced to restrict reservations/desktop pools access to specific lab locations based on LAN IP addresses or WAN IP address or MAC Addresses.

Following types of parameters can be used to define a client group:

- LAN IP (Used for HyWorks Clients only)
- MAC Address (Used for HyWorks Clients only)
- WAN IP (Used for HyLite)

Client Groups Management

Client groups can be managed using *Client Groups* screen available in HyWorks Management Console (*Administration* section) and RMS Portal (*Configurations* section for user with reservation admin user only)

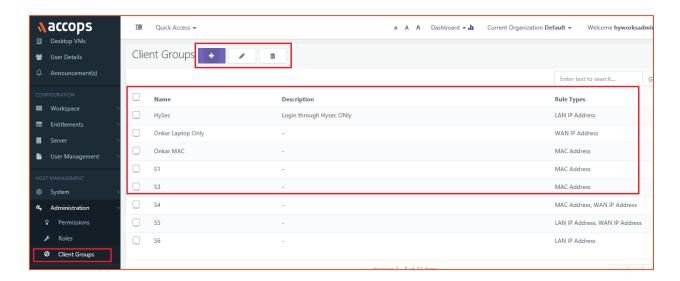
HyWorks Administrations

The page enables following features:

- View, Add/Update/Delete Client Groups
- It will also show the CSV imported client groups as well.

Note:

Client Groups CSV import is only available in RMS – CSV Configurations screen



Ability to Sign-out Unauthorized Direct RDP connections

Accops served session host servers and virtual desktops can be protected from unauthorized direct RDP or console sessions using new features integrated into HyWorks Session Host servers and HyWorks Desktop Agents.

Enabling this feature, will only allow following types of users/ configurations for remote access:

- 1. Direct RDP or console access by domain administrators
- 2. Direct RDP or console access by local administrators
- 3. Accops initiated remote sessions (Desktops or Applications)

The feature validates all remote and console sessions on the server and as per the defined policy (configurations) allows or removes the session.

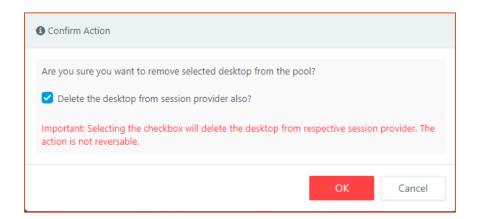
The configurations are registry based and can be done manually or can be pushed using group policies in AD based environments.

Option to Remove Desktop from Hypervisor

Remove Desktop from Pool action in **Desktops** tab now will present a checkbox to administrator, for removing the desktop from Hypervisor as well.

The checkbox will come default checked for desktops deployed in HyWorks using dynamic provisioning.

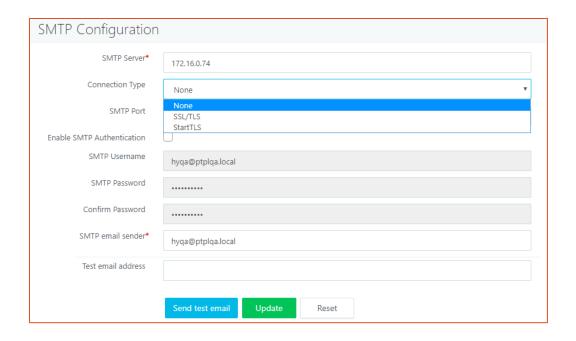
Non-provisioned desktops from desktop pools will have checkbox as unchecked.



Improved Support for SMTP Configurations with SSL/TLS and StartTLS

SMTP configurations are improved to support following configurations:

- SMTP support over port 25 with/ without authentication
- Support over port 465 with SSL/TLS or StartTLS security and with authentication
- Support over port 587 with SSL/TLS or StartTLS security and with authentication



Reservation Management System

HyWorks v3.2 is having integrated reservation management system, which is a fully automated scheduled desktop delivery system for lab-based environment.

RMS is having multiple high-level features, which are briefly introduced below:

- Self-service portal and role-based access for users, making the system administrator job much easier
 - a. Administrators and lab incharges can make reservations for labs and manage Gold Master images
 - b. Assistants can help in managing lab reservations
 - c. Students can access lab based reserved VMs and do self-study in off-hours reusing the same lab machines
- Management and access of Gold Master machines, easing the content management and security
- 3. Multiple levels of scheduling of reservations, making it easier to deliver
 - a. One-time schedules, recurring schedules, never ending schedules, combination of one-time and recurring schedules can be easily created
- 4. Reuse of same infrastructure
 - a. Once lab time is over the machines will be deleted and the same infrastructure will be available for next labs
- 5. Complete automated execution using automatic CSV import functioning
 - a. All functioning of RMS can be automated using automatic import of CSVs from local/remote shared CSVs
- 6. Automatic deployment, preparation, e-mail alert and automatic fixing the issues in reservations
- 7. Ability to send important announcements on user's dashboards
- 8. Support for Linux and Windows based desktop deliveries
- 9. Restricting access to Lab machines by using Client Groups

Client Support for RMS

Users with appropriate permission and member of running reservations will be able to access the reserved VMs from HyWorks clients.

The assignment of reserved VM will happen, when users will attempt to connect the reserved VMs.

• Display Course-Name on HyWorks Client

Administrator can configure to show course name to end-users signing-in from HyWorks Clients. The configuration is available in *Default Reservation Settings -> Reservation Display Name*.

Administrator will be having option to configure reservation name or desktop pool name or course name.

Important Characteristics of Client with RMS

- Common error "No desktops or applications are assigned to this client" will be shown, when there are no active reservations
- Login time can be high if the target desktop VM from reservation pool is not ready (Powered-on but not ready, suspended or powered-off)
- Power operations will not work, until the assignments are done

Linux based Virtual Desktops and Applications Delivery

In HyWorks v3.2, following Linux based deliveries can be done to end users:

- 1. Dedicated Desktops to end users
 - a. Ubuntu-Gnome 16.04-x64
 - b. CentOS-Gnome 7-1708-x64
- 2. Shared Hosted Desktops and Shell Applications
 - a. Accops Linux SHD (Customized xUbuntu 16.04.4-x64)

Please refer Linux VDI and SHD documentations for detailed information on configuration and deployment of Linux VDI or SHD.

Support for Nutanix AHV and Prism Central

HyWorks v3.2 GA supports dedicated desktop delivery and provisioning with Nutanix AHV and Prism Central. The release is having support for following versions of Nutanix:

Nutanix as a dedicated session provider supports most of VDI features as described below:

- 1. Configuration as dedicated session provider
- 2. Desktop Pool creation and delivery using existing desktops residing on Nutanix servers
- 3. Provisioning of new desktop VMs using dynamic provisioned pool in HyWorks
 - a. Snapshot based cloning
 - b. Persistent and Non-persistent Desktops provisioning
- 4. Power operations on desktops

Supported Nutanix Sever Versions: Following versions of Nutanix servers are tested and supported with HyWorks v3.2 GA release:

- Prism Element v5.5.3.1 (NCC#: 3.5.2)
- Prism Element v5.8.2 (NCC#: 3.6.1)
- Prism Central v5.8.2+ (PE v5.8.2)

Note:

• Support for older versions of Nutanix servers is untested and may have some limitations due to differences in APIs exposed by Nutanix servers.

Named User Licensing

Apart from registered device based and concurrent session based, controller now will also support Named User Licensing. In Named User Licensing, once a user has logged-in to HyWorks and it will be considered as one license consumption. The licenses will remain consumed until the user is deleted from HyWorks.

User Details

New page *User Details* is available for the administrator, which can be used to gather following information about the user:

- 1. User Information e.g. Display Name, Group Memberships, DN, Phone Number, Email Address etc.
- 2. Desktops assigned to user
- 3. Applications assigned to user
- 4. Access Policies for the user along with applicable connection profiles for sessions

The user information will be automatically added into HyWorks on the first successful login and will remain there until deleted.

License Sharing

Organization-based license distribution in HyWorks was very static and thus once allotted, was **not** allowing organizations to consume licenses not in use by other organizations.

In v3.2-GA, license sharing will be possible, where administrator will be able to reserve a minimum number of licenses for an organization and allowing organizations to use unreserved licenses from shared pool up to a maximum allowed limit.

The feature also allows the administrator to view the overall licensing usage in the organization in System – Licensing section.

Shared Hosted Desktop Customization Using HyShell

HyShell, once enabled using registry entries (in Windows Shared Hosted Desktops) or through configuration files (In Linux Shared Hosted Desktops) can be used to customize the desktop by creating shortcut icons of all published applications.

The HyShell feature is available for Shared Hosted Desktops only and creates shortcuts based on the following configurations:

- 1. HyShell is enabled on session host server
- 2. Application configurations (Access settings) are configured to create desktop shortcut or start menu shortcuts on shared hosted desktops
- 3. Applications are published from the specific session host server and user is entitled to access those applications

Option to Assign Dedicated Desktops 'On Login' or 'On Connect'

Option in Desktop Pools – Advanced Settings is provided to configure desktop assignment logic for Floating type desktop pools.

Available options are:

- On Login: Desktops will be assigned on login
- On Connect: Desktops will be assigned when user will attempt to connect the desktop

For On-Connect Floating Desktop Pools, another timer will be available to remove the assignment of disconnected desktops. The timer will be used to remove the assignments, which were assigned to user on-connect and then have been disconnected.

Assignments will be removed on following conditions:

- 1. Predefined time limits after desktop session disconnection
- 2. User session disconnection
- 3. User session log-off

Announcements

HyWorks v3.2-GA supports customized for HyWorks v3.2-GA clients and RMS Portals.

Following different types of announcements are supported:

- Audit Announcements: Customized login agreement, which allows user to continue loggingin only on accepting the audit announcement. Shown only on Logon.
- Maintenance Announcements: Announcements for HyWorks or system maintenance, will be prompted on-logon during maintenance period.
 - Maintenance announcements will also be listed clients.
- General Announcements: Not

Announcements will not be supported on:

- Old HyWorks Clients
- HyWorks User Portal
- HyLite

Asynchronous Provisioning with VMware vCenter Server

In HyWorks v3.2, provisioning is being made asynchronous for VMware vCenter Server, which will have the benefit of more reliable provisioning.

Enhanced Support for SCVMM2016

SCVMM 2016 support is further enhanced to have following important enhancements:

Snapshot based cloning (Full/ Linked)

Now Linked Clone or Full clones can be made from a specific checkpoint of the master image (source VM).

Copying Network Adapter Information from Source (Gold) Image

Earlier issues were faced with network adapter not getting attached on clones. The issue has been fixed and the enhancements are done to get the network information from the source image itself.

• Reading Boot Configurations from Gold Master

With non-windows VMs, enabling secure boot configuration was causing issues with identifying the disk with operating system. Now while cloning secure boot configurations are read from source (Gold) image and the same are being copied on cloned VMs.

Full Clone Enhancements

While cloning from source (Gold Image), all checkpoints were also getting copied to clones and the process has been improved to remove all checkpoints from cloned VMs.

• Automatic Host Selection in SCVMM Environment with Hyper-V Clusters

While provisioning with SCVMM having cluster of Hyper-V servers, enhancements have been done to select the most suitable host from the cluster for placing the cloned VM.

Saved State Support with Microsoft SCVMM/Hyper-V Servers

Handling of **Saved** state of VM has been improved with option to power-on the VM has been provided on HyWorks Controller Management Console and HyWorks Client.

Limitation: No option in HyWorks Management Console is provided to move the machine to Saved state.

• SCVMM Cluster Support

SCVMM servers running in cluster mode can also be configured with HyWorks Controller to support SCVMM failover. To support the feature, connector installer provides option to install in cluster mode.

Enhanced Flow for Non-persistent desktops

Problems were faced with desktop agent reachability with non-persistent desktops after restoring, the flow has been enhanced to create restore point after shutting down the DVMs gracefully, so that on restore, DVMs will be started correctly.

Multiple Sessions with Single User Support

Earlier HyWorks controller was allowing only single session for a user. Now using Advanced configurations, administrator will be able to configure multiple sessions using single user credentials.

Whenever user will login from different endpoint a new session will be created, and user will be able to connect to assigned applications.

Following configuration must be enabled for multiple sessions using single user credentials:

Management Console - System - Advanced Config - Enable Multiple User Session: Set it as True

Reconnection between Windows and HyDesk/Linux Clients

In HyWorks v3.2, it will be possible to reconnect the existing SHD sessions between Windows and HyDesk/Linux Client. This requires enabling shell-based session for HyWorks Client for Windows:

Management Console - System - Advanced Config - Enable Win Alternate Shell: Set it as True

Global Option to stop pushing date changes on HyDesk Endpoints

If HyWorks detects the clients as HyDesk, it pushes the controller changes on client machines and thus may cause date changes. Following advanced configuration can be used to stop pushing the date changes to endpoints:

Management Console – System – Advanced Config – Stop Controller-HyDesk Date Sync: Set it as True (Default value: False)

Option to Configure SQL Server for Logging

Earlier the configuration of SQL server for logs was possible by modifying HyWorks service configuration file and the configurations were getting overwritten over upgrade.

In v3.2 the option is provided in installation wizard itself and the future upgrades will not overwrite the logging server configurations.

Option to ignore user activity, once sessions are disconnected

On Windows clients, user sessions were kept active even after when App/SHD sessions are not running.

Using following advanced configuration (default true), HyWorks will not consider user activities for HyWorks sessions:

Management Console – System – Advanced Config – Disable HyDesk Activity Monitoring: Set it as True

Enhancements to enable Session Host Server creation using Provisioning

Desktop agent and session Host agent modules have been improvised to support provisioning of Windows Servers installed with session host server module. The enhancements will support the direct usage of cloned servers as session host in HyWorks deployment.

Escape Character Definition in Additional Command Line Attribute to Support Comma (,) in Command Line

In previous releases, it was not possible to specify additional command line parameter with comma in it. V3.2 supports following escape character to use comma in additional command line parameter:

[101]

User Session and Application Access Monitoring Logs

HyWorks Desktop Agents and Session Host Agents can be enabled using registry-based configurations to send user session and application access logs to Syslog server.

HyWorks Clients: Features and Enhancements

Following features and enhancements are being delivered with v3.2-GA HyWorks Clients:

MAC OS Client Release: v312093

Release for MAC client is available to download as an independent installer, supporting following operating systems

El Capitan:10.11.x,
 Sierra: 10.12.x
 High Sierra: 10.13.x

Note:

• HyWorks Client for MAC does not support all features of HyWorks and thus should be used as per the suggested configurations by Accops Support team.

SEP support for RDP10 (HyDesk Hy4000/Hy3000/Linux Client)

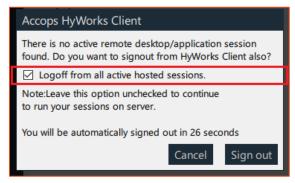
All Linux based HyWorks Clients i.e. HyDesk Hy3000, Hy4000 or xUbuntu (16.0.4.3-x32/64) Clients will now support SEP (Enhanced USB Redirection) driver with RDP10 protocol.

Until RC9 only built-in or Eltima USB redirection drivers were supported with RDP10 protocol on Linux based devices.

Improved Auto-logout with option to Sign-out or disconnect the session

With user having access to a single desktop or application, on disconnection of the session, user session will automatically be logged out in 60 seconds.

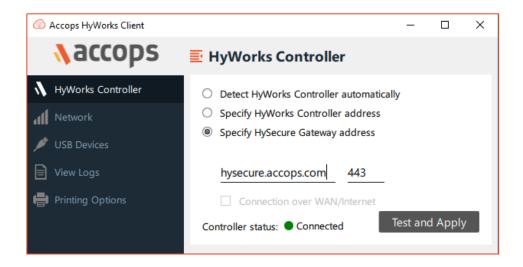
On remote App/ Desktop session disconnection, the user will be prompted with a dialog to sign-out the session or continue to use it with an automatic timer of 60 seconds.



Connection through HySecure Mode

HyWorks client is now having option to connect via HySecure to deliver HyWorks applications. The feature will help in delivering HyWorks Apps/ Desktops over the internet using HyWorks client.

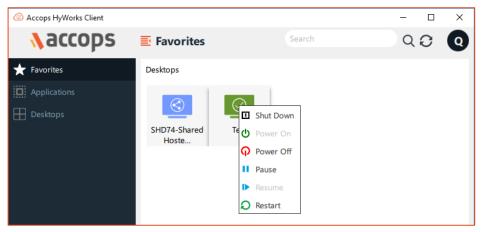
User must provide the HySecure Gateway address with appropriate port configuration. Appropriate applications (HyWorks Controller, Application Servers) should be published on HySecure.



Power Operations support

In HyWorks v3.2, users will be able to initiate the power operations on assigned dedicated desktops. Power operations will be available as per the current state of the desktop.

To initiate a power operation, right click on assigned dedicated desktop and select the option to initiate operation.



Option to Open Log Files on Client side

On client, option *View Logs* has been provided which can be analyzed on client side to troubleshoot any client-side issues having connectivity issue with HyWorks Controller or Gateway.

HyWorks Client for Windows

Installer Changes to Support Installation in Thinclient or desktop Mode

While installing HyWorks Client for Windows on desktops, option to install client in Thinclient or Full desktop mode will be displayed.

The option Thinclient mode is recommended for HyDesk Hy3020/Hy4020 devices, whereas while installation is done on user desktops, Desktop mode should be used.

Silent Installation using Command Line Arguments

New HyWorks Client for Windows supports installation using command line with following switches:

- /S: To install silently
- /SEP=yes: For SEP installation (User must use client installer having SEP integrated)
- /Eltima=yes: For Eltima installation (User must use client setup having Eltima integrated)
- /kiosk=yes: For installing client in thinclient mode. (Default: Desktop mode)
- /reboot=no: For installing HyWorks Client and not rebooting post installation (Will require manual reboot, if SEP/Eltima is being installed for correct functioning of USB redirection drivers.

Example:

 For installing HyWorks Client with SEP and Eltima both, and reboot automatically run the following command:

Accops_HyWorksSetup_with_SEP.exe /S /eltima=yes /SEP=yes

Shortcut keys to minimize SHD/Dedicated Sessions

Following shortcut keys can be specified as additional command line options to enable shortcuts to minimize or restore full screen desktop sessions:

- accQuickMinimize:i:1, accHotKeyFullScreen:i:16: Mentioning the above commands, shortcut keys "*Ctrl* + *Alt* + *Shift*" can be used to minimize the full screen desktop sessions.
- accQuickMinimize:i:0/(Empty): Mentioning this additional command line parameter will
 enable the shortcut keys "Ctrl + Alt + Shift" to restore the full screen desktop sessions.

Option to Open RDP Session on Single Monitor (Stop Multimonitor for Remote Session)

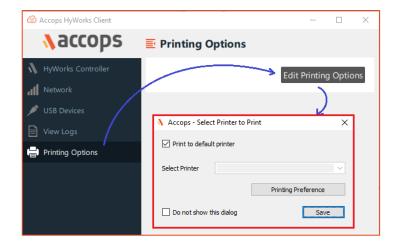
Specifying the following additional command line option will enable enforce desktop sessions to be opened in single monitor, though user is using it on single monitor:

• use multimon:i:0 (By default command sent is Use Multimon:i:1)

Printer Option on Windows Client

Windows client is integrated with an independent module to configure printing options. Which can be used to configure following settings, while printing using HyPrint PDF Printer:

- 1. Choose to send the print job to default printer
- 2. Choose to send the print job to configured printer (Selecting default printer for HyPrint PDF Print)
- 3. Setting-up printing preferences for configured printer
- 4. Option to show the dialog for all print jobs, so that user can either click on **Open** or **Print** from **Printing Options** dialog



Accops Session Server Extensions: New Features and Enhancements HyPrint PDF Printing Support for Linux SHD and Desktops VMs

HyWorks DVM Tools for Linux SHD and Desktop VMs are having integrated HyPrint PDF Printer module, enabling PDF based printing from Linux session servers.

HyFR Integrations

All latest DVM Tools and session host agents are having integrated server-side file redirection modules and HyWorks Clients are having client-side extensions for file transfer.

HyFR module enables the file transfer between client and remote server machines, also the file transfer logs are sent to configured syslog server. After enabling file transfer,

- Right click context menu on files will show option '*Download files to local computer*', which on selection will open *Save as* windows, showing file system of client computer
- Right clicking on any directory/desktop will show option to "**Upload file to local computer**"; which on selection will show **Open** dialog, showing client computer file system

Following additional configurations are also possible:

- Blocking any specific type of file types
- Stopping compression of specific file types

HyWorks v3.2-GA Important Bug Fixes

Using attached ISO datastore for Cloning

HyWorks was using datastore of ISOs for provisioning the VMs when the source VM is having ISO attached and destination datastore is not defined in deployment settings.

The defect has been fixed and now HyWorks will not use the datastore of attached ISO.

Enhancement in Host Selection Logic while cloning

With some hosts down in vCenter host cluster, HyWorks Controller was incorrectly selecting the down host and thus causing the failure in cloning.

The behavior has been now been improvised to always use best host in cluster.

Unable to detect Folder object of type Hosts in VMware deployments

Until RC6, when there were Hosts and Cluster folders in VMware tree, HyWorks was not able to identify the objects underneath them. The tree view of deployment settings has been improved to get the details of Host and Cluster folders.

Sysprep is running again on provisioned desktops after desktop tools upgrade or uninstallation and reinstallation

With SCVMM as dedicated session provider, it was observed that desktop agents on upgrade are causing re-execution of Sysprep for provisioned desktops. The fix has been done at Controller as well as DVM agent side,

- Controller on detecting that a specific desktop is already sysprepped will not send Sysprep command again
- Latest HyWorks DVM Tools on upgrade or uninstallation will retain the registry configurations.

Controller creating multiple user sessions, when user signing-in with different credentials format

In an issue, where users are using different credential format e.g. username or username@domain-name or domain-name\username, then multiple user sessions are getting created and users are not getting reconnected to existing user session.

The issue is fixed and now users will be given single sessions even on using different logon-name formats.

DVM Agent will avoid upgrade if Sysprep is enabled

Error situations can occur, if desktop pools are enabled with auto-upgrade of desktop agent. The issue has been fixed and flow has been enhanced:

 Desktop agent will first upgrade and then will execute the Sysprep to avoid any possible corrections.

HyWorks Controller/ Session Host Server setup fails to install, if Windows Firewall service is not running

On Windows servers, where Windows Firewall service is disabled or stopped, HyWorks Controller or Session Host Server installation was failing.

The issue has been fixed in HyWorks v3.2-GA. The setup will identify status of Windows Firewall service and on finding it not running, prompt a dialog to run the service and then continue. Even on continuing without starting Windows Firewall service, the setup will not fail but will also not create appropriate firewall rule.

Known Issues – Accops HyWorks V3.2

Note:

Strikethrough sections represent the issues, which are resolved in GA or previous releases.

Known Issues - HyWorks

Following limitations and issues are known in HyWorks V3.2-RC3 Release:

Controller Configuration and Installer Issues

- 11. [-] Prerequisite .Net 4.7.2 is must for HyWorks Servers
 - a. Windows servers to be configured/upgraded with HyWorks Controller or Session Host Server must be installed with .Net 4.7.2 prior to installation or upgrade
- 12. **Upgrade**: During upgrade process and moving controllers from Maintenance to Primary or secondary, inappropriate syncing may happen and may cause some fatal issues.

Workaround and recommendation: While upgrading Primary or secondary, keep secondary in Maintenance mode. This will require downtime as both services will not be available for some time; but will help in preventing post upgrade syncing issues. See HyWorks Controller Installation Guide for more details.

- 13. Upgrade over v3.0 or older versions, causes following issues:
 - a. Desktop pools cannot be modified and clicking on Edit button does not work
 - b. Assignment from desktop pools are not working

Resolution: A separate patch has been released, which must be executed on setups upgraded from v3.0 or older. Please refer section https://example.com/hyworks-v3.2-GA for download link of the patch.

14. [#4611] Management console - web.config file is overwritten on upgrade and thus all manual changes will be over written.

Workaround: Take backup of existing configuration before upgrade and re-write the web.config file after the upgrade.

15. User Portal or RMS portal are not default enabled and thus will not be shown on HyWorks Controller Management Console login page, to enable these modules.

Resolution: Refer HyWorks Controller Installation guide for detailed step by step process for enabling RMS/User portal.

16. [#3832] Sometimes, installer may fail to start Windows Session Host Agent or Monitoring service due to system slowness or service start timeout.

Resolution: Ignore the error and click on OK button. Manually start the service later.

17. [#510] HyWorks Controller [configured with SQL Server] will fail to start or function correctly if SQL service is not running. If HyWorks service starts before starting SQL server, then HyWorks cannot recover from the error.

Resolution: If HyWorks Controller is using SQL Server installed on the same machine - define the dependencies using command line:

sc config HyWorksService depend= MSSQL\$SQLEXPRESS

- 18. [#509] Secondary Controller entry will get added when restoring database during fresh install and administrator must delete the secondary controller entry manually to overcome the situation.
- 19. [#3834] If HyWorks Controller is configured to have Microsoft AD group as default administrator, the groups can be modified post installation and thus can bring system to without superadministrator state.

Resolution: System can be restored back using the repair operation.

20. [#4800] HyWorks Controller Service configuration changes will get over written on upgrade and will require reconfiguration.

User Details

- 1. Sometimes additional (built-in) groups are shown in User Details page.
- 2. For floating type desktops, User details page will not give the actual desktop name.

SCVMM Provisioning

1. [-] Compatibility: HyWorks Controller v3.2-GA, must be used with HyWorks Hyper-V Connector v30 (RC9) or greater. Multiple errors will be logged, while using old Hyper-V Connector and GA HyWorks Controller.

[Resolution] Uninstall old Hyper-V Connector and install latest GA Hyper-V Connector v32

2. Direct upgrade of Hyper-V Connector is not supported

Resolution: Previous version should be uninstalled before installing newer Hyper-V connector

- 3. [#3775] Provisioning with SCVMM 2012R2 is not functioning and thus will not be supported in HyWorks V3.2-GA Release
- 4. [#3294] Provisioning with SCVMM 2016 fails if Source or Gold image is having DVD drive attached to it
- 5. [#3163] Full clone creation with SCVMM (2012R2/2016) fails if the gold image does not have any network card attached to it.
- 6. [#3636] Provisioning with SCVMM 2016 fails if source image is installed on Cluster Volume but not HA enabled
- 7. [#3794] DVM Refresh logs are sent to default organization instead of child organization where the desktop pool belongs
- 8. Incorrect hostname (Hostname of base Hyper-V) is shown for all desktops for Hyper-V 2016 session provider
- 9. Hyper-V connector is going unreachable in some cases on SCVMM-2016
- 10. Linked Clones of Generation#2 Linux VMs (CentOS/Ubuntu) failed to boot from disk

[Workaround] This is a known issue from Microsoft and must be worked around using steps mentioned in following article:

https://blogs.msdn.microsoft.com/virtual pc guy/2015/02/11/copying-the-vhd-of-a-generation-2-linux-vmand-not-booting-afterwards/

Note: Even with above workaround, the cloning job in SCVMM console will be shown with error, but It can be ignored, the desktop VMs work fine.

Authentication Server and Authentication Domain

1. [#3784] Duplicate authentication server can be added in Controller if we update Existing

- 2. [#2928] AD Authentication server can be added though showing error while test connection with invalid address and with invalid username.
- 3. [#2238] Object reference error while Test Connection initiated for Active Directory authentication server and provided details are of Novell eDirectory
- 4. [#2624] Status is shown as Active in the **Dashboard** -> **Authentication Servers** section, even when the authentication server is not reachable.
- 5. [#2584] Group with special characters (warning is displayed while adding such groups in AD) may not get added in HyWorks Controller Entitlements
 - a. [#2629] Groups having special character "|" in name are not getting added in HyWorks entitlements.
- 6. [#-] Sometimes Active Directory group membership changes are not getting reflected immediately on HyWorks Controller. E.g. if user1 (member of group1) and group1 having assignment of app1, even after the user is removed from group1, the user may still get app1.

Resolution: No solutions are available yet. The issue is being investigated.

- 7. [#3835] Entitlements won't get removed if authentication server configuration in Authentication domain is changed or users are deleted from authentication server
- 8. All entitlements will be deleted if respective authentication server is deleted
- 9. [#3836] If *User Synchronization Type* configuration in *Organization* settings is set as **On Login**, the user login for the first time may take some time as it will require user account to be created after logon.
 - a. On Login User Synchronization Type is slower than the normal AD/LDAP based login since user account must be synchronized on every login with assigned desktop or shared session host server.
- 10. [#1953] OU and Group based environments are not supported with Novell eDirectory or Open LDAP authentication servers.
- 11. [-] Workgroup support is deprecated in HyWorks v3.2 and should not be used.

Logs Management

1. [#3209] HyWorks Controller does not archive the logs and thus on reaching the maximum allowed records (Configurable from System – Advanced Configurations), it starts cleaning the old records.

Workaround: Please use recently added feature to Configure Syslog server in HyWorks for Archiving.

- 2. [#2103] On upgrade over v3721, all existing logs will be cleared, its recommended to take backup of existing logsDb file before performing the upgrade to save existing Controller logs.
- 3. [RM-3142] Download logs fails with Management Console in Japanese with error-61 (Most probably in Japanese OS)
- 4. [RM-4340] Japanese string event logs from HyWorks Controller are not sent to configured SYSLOG server

Workaround: Manually Configure the Syslog settings using config file modification on HyWorks Controller server (Default path: Installation directory -> Service -> log4net.config)

- 5. [RM-3786] Stack Trace logs are not sent correctly to syslog server and being scattered in 3 rows Workaround: Manually Configure the Syslog settings using config file modification on HyWorks Controller server (Default path: Installation directory -> Service -> log4net.config)
- 6. Reset button syslog configuration does not work correctly, Resolution: To stop sending logs to syslog server, uncheck the option *Enable Syslog*
- 7. In a very rare case, logs for Fix Reservation operation are not getting generated

Licensing

1. [#3210] Upgrade over any v3.0 releases (lower than v4649), will make the license invalid and reactivation of license will be required.

Please contact Accops Support team before doing any upgrade.

Session Management

- 1. With no desktop or application sessions running, user session will become idle and will not get re-activated on any actions on client UI, until user connects any virtual desktop or application session.
- 2. [#963] Application session entries get removed for applications which starts child processes and then exists. User session on session host server will continue to run, only HyWorks Controller will lose control over application access. Example of such applications are Internet explorer, Microsoft Word and Microsoft Excel.
- 3. [#1963] Reconnection to existing session will not work in following conditions:
 - a. When the shared hosted desktop session is taken from HyLite and then the next session is taken from HyWorks Windows Client or vice versa.
 - b. Applications accessed in shell mode from HyLite, will not get reconnected
- 4. [#1735] Sessions to old HyWorks 2.5 Client, will be unmanaged and may not be controlled; which means the session timeouts or shared hosted desktop session removal will not work. The controlled shared hosted desktop sessions are only available from Client v3.0 or greater or HyLite.
- 5. [#3212] Applications deleted from HyWorks Management Console, will not affect the already running user sessions, which means users will be able to access those applications, until they logout and log-in again.
- 6. [#2097] Different behavior for shared hosted desktop and dedicated desktop session
 - a. On removal from controller by Administrator
 - i. Shared hosted desktop gets logged out
 - ii. Dedicated desktop gets disconnected
 - b. Disconnected VDI sessions will not be shown in VDI sessions page whereas Shared VDI sessions are shown in Disconnected state
- 7. [#3822] When Session Host Agent is not reachable and different sessions are removed from controller, following behavior is expected:
 - a. Removal of dedicated desktop sessions: Sessions will be removed with success, but won't be removed from desktop side
 - b. Removal of shared hosted desktop session: Sessions will be removed with success but won't be removed from server side
 - c. Removal of single application session: Sessions won't be removed, and error will be displayed
 - d. Removal of Provider session with single or multiple app sessions: Session will be removed from controller with success but will not be removed from session host server
 - e. Removal of user session with single or multiple app/desktop sessions: Sessions will be removed from controller with error, but corresponding app and desktop sessions won't be removed from server or desktop side
- 8. [#2658] Intermittently 'Object reference errors' may be logged, when sessions from HyDesk devices are initiated and failing.
- 9. [#2457] Disconnected since value displays incorrect time for VDI sessions: it displays the time from when the session was established instead when the session was disconnected.

- 10. [#2713] Continuous disconnection notification messages in logs for older HyWorks clients, which do not support disconnect request.
- 11. [#3155] When connection fails, on HyWorks Controller Management Console -> VDI session is being displayed in Idle state
- 12. [HW-490] Client having both device and user-based assignments may result in mismanaged sessions and is not recommended
- 13. [HW-549] With multiple applications in disconnected mode (Few Shell/Few Remote Apps), not all application sessions will be reconnected on next logon.

Multi-session from Single User

- 1. Session Management with same credentials from multiple devices does not function correctly for device based SHD desktop pools. Hence device based SHD desktop pools are not recommended and only user based SHD desktop pools should be deployed.
- 2. Multi-session using same user configurations are not recommended for user based dedicated desktops pools, as users won't be able to get different desktops in user based temporary or permanent dedicated desktop pools

Application Delivery

- 1. [#2016] All Remote Apps get disappeared when we click on adobe reader's prompt message for making it as default
- 2. [#1246] Skype as remote application does not work on HyDesk Hy3000/Hy4000

HyShell

- 1. [-] Enabling HyShell requires explicit registry entries to be created on every session host server
- 2. [-] HyShell is currently supports the desktop shortcut creation for those applications, which
 - a. Currently enabled
 - b. Assigned to the currently logged-on user
 - c. Belongs to currently accessed SHD
- 3. [-] HyShell will not remove public shortcuts created by admin or other users
- 4. [-] HyShell does not remove files or folders from user's desktop, only private (user specific) shortcuts will get removed as part of customization process

HyWorks Controller Management Console Browser Compatibility

1. [#3823] HyWorks Management Console should be used in Internet Explorer 11, Google Chrome, or Firefox browsers. On Internet explorer (v10/ v9/ v8) management console may not work as expected.

Entitlements

- 1. [#2664] Select All and remove not working on any of entitlements or add/edit entitlements if selection includes more than 100 records.
- 2. [#2663] More than 500 users displayed in list even though message says maximum 500 search results are displayed on App entitlement wizard -> Resolved in HyWorks V3.2-RC3 Release

Remote Control Advanced Configurations

- 1. [#3824] The advanced device configurations especially custom shell password requires HyDesk devices to be rebooted. Even changing shell password requires reboot.
 - a. Controller does not show any warning while the configurations are being changed but HyDesk endpoints will reboot to apply new settings.
 - b. Controller may not show any alert in case of password mismatch between Controller and registered HyDesk devices.
- 2. [#3211] The advanced configurations (Custom Shell and Remote-Control Password) won't work for old HyDesk v2.5 SP1/SP2 Clients but administrator can choose to enable only limited options i.e. Enable Remote Shell and Enable Remote Control for v2.5 Clients.
- 3. [#3827] For HyDesk4000, the character limit for Remote Shell password is 5 characters only and specifying more than 5 characters will not get set (the older password will continue to work)

User Synchronization, Built-In Directory and CSV Import

- 1. [#3828] Password policy on RDS server must be configured correctly else it may affect the user synchronization (addition and update) adversely.
- 2. [#3829] User profiles may not get deleted if the files are in use due to running or disconnected sessions.

Organizations

- 1. [#1427] Deletion of an organization depends on multiple resources and will not get deleted until all dependencies are solved. The operation may not present a very user-friendly error.
- 2. [#3837] Registration of devices will be deleted from original organization, if the device is being moved into other organization. Please note, device deletion also deletes its entitlements.
- 3. [#2634] Object reference error while changing Auth Domain settings from Inherit to create Auth Domain. The error condition will only be corrected by reverting the Auth domain settings to previous values.

Connection Profiles

- 1. [#2273/2023] Connection profile is randomly picked, if a user is member of two groups and both groups are assigned with different connection profiles.
- 2. [#3838] Not all configurations of connection profile are applicable for all types endpoints and these options should be configured correctly.
 - a. In some cases, connection profile specified option does not work as expected e.g.
 Desktop background does not get disabled with LAN connection type and desktop background option is unchecked.

Session Providers

- 1. [-] External Session Providers, TSE and Pano Controllers are not tested in this release and may have some unknown issues. The configuration of external session providers should be avoided.
- 2. [#3538] Provisioning will not be supported with ESXi Servers
- 3. [#1539] Controller cannot add itself as RDS server using hostname and may display error.
- 4. [#3846] On Windows 2008R2, all remote applications get closed and then gets reopened on switching between applications.

- **Resolution:** Windows 2008R2-SP1 along with few additional Microsoft patches need to be applied. Please contact Accops Support team for getting the information of the patches.
- 5. [#3847] With TSE configured as desktop provider and having more applications with strings 'Desktop' in name, desktop session will not get launched
- 6. [#3853] If TSE and Pano Controller both are configured in HyWorks, session from Pano Controller will fail and thus the configuration is not recommended.
- 7. [#3272] If TSE is configured as Active Session Provider in any organization, Shared Hosted Desktop from same server will not be provided.
 - **Resolution:** Use organizational structure to deliver TSE and SHD desktops from two different organizations.
- 8. [#3854] It is not possible to resume suspended DVMs from Pano Controller and will require administrator to manually resume the DVMs from hypervisor management console
- 9. [#3779] DVMs from Hyper-V 2012R2/ SCVMM 2012R2 dedicated session providers will not go into any error state if Hyper-V/SCVMM services goes down
- 10. [#1849] Installation of HyWorks Session Host Server on the TSE Application Server does not function correctly and its advised to install TSE and HyWorks Session Host Server on different machines.
- 11. Session provider with same name can be created by modifying the provider name and then entering same name as another session provider. [#2703]
- 12. [#3056] Single sign-on with HyWorks Windows Client is not working correctly if NLA is enabled on target Desktop.

Workaround: NLA should be disabled for delivery from HyWorks.

- 13. [#2938] Dedicated Desktop provider can be added without providing username or password or both.
- 14. [HW-536] In some rare cases, deleting session team also deletes shared session hosts added in the team. It is expected to move the session hosts to the default team of that OS type.

Nutanix Support as Dedicated Session Provider

-	Hostname of desktop cannot be obtained and thus not shown in Desktop VMs page
-	Specifying storage pool in advanced deployment setting, does not work with Nutanix AHV version < 4.8
-	Intermittently some machines from non-persistent desktop pools are not getting powered on after the creation of restore point
-	Rarely, operations on Nutanix server failed, when multiple session providers of type Microsoft SCVMM/Hyper-V are added.
	[Recommendation] Avoid using SCVMM/Hyper-V providers in the same HyWorks deployment, where Nutanix is being used.

HyWorks Controller Cluster

- 1. [#HW-668] With SQL Server down on primary HyWorks Controller, the detection of failure condition may take some time and cause some HyWorks operation failures.
- 2. [#3855] The servers being configured in cluster must have time synchronization else it may affect the all the HA functionalities adversely

- 3. [#3855] In case of network disconnection or SQL Service down on HyWorks Controllers (primary or secondary), the next primary server cannot be known and may cause some data loss.
- 4. [#3855] Currently the database of secondary server is synchronized after every 60 seconds and thus in case of failures most recent sessions or configurations i.e. established after data sync may be discarded by secondary server.
- 5. [#3855] Administrator can configure both servers as primary or both as secondary (Not recommended) however servers will get reconfigured as primary and secondary after some time.
- 6. [#3855] HyWorks Controllers do not work in active/ active mode and do not support any kind of load balancing in this release.
- 7. [#3855] Controllers running different versions should not be configured in Cluster.
 - a. While upgrading Controllers in cluster
 - i. Only one server should be upgraded at a time and one server in configuration must be in *Maintenance* mode
- 8. [#3855] HyWorks Client version information and banner information is not being synchronized between HyWorks Controllers in cluster and thus on server failure the banner may get reset and devices may be shown version alert.
- 9. [#3855] If first controller sever is completely configured with multiple organizations and license distribution and then the secondary server is added to it then on secondary it may display the license allocation with some negative numbers.
 - **Resolution**: Apply the cluster license on the secondary server and all license allocation conflicts will be solved.
- 10. [#3855] Controller servers will become unusable if both controllers are set to Maintenance mode and then cluster is deprovisioned using removing one of the servers from the cluster
 - **Resolution**: The environment is unrecoverable unless the controller databases are modified to set the mode back to primary or secondary.
- 11. Removal process of HyWorks Controller from cluster is not functioning correctly and may leave entry on other server, which is being removed and leave residual entries in both member controller servers databases. This may affect the future functioning of cluster.

Workaround: Please contact Accops Support for obtaining HyWorks HA removal tool or for cleaning of DB using SQL Management Studio for cleaning of databases post removal of HyWorks Controller from cluster.

Dedicated VDI and Provisioning Issues

- [#3401] Dedicated VDI: In case of multiple IP address being assigned to Desktop VM, the HyWorks DVM Agent status will throw object reference error
 - **Resolution:** Configure IP Range to be used for desktop pools. Check reference article on Accops Support Portal
- 2. HyWorks Tools upgrade is supported only on following HyWorks Tools versions:
 - a. Version 2.5.4.1 (HyWorks 2.5-GA Release)
 - b. Version 3.0.3.13 (HyWorks 3.0-SP1 Release) or later
- 3. [#3194] Linked Clone creation fails, if length of Base VM name exceeds 35 characters.
- 4. [#3856] Multiple, parallel cloning will get started when controller is in process of cloning and if spare VMs need to be created, consider the example: A pool was created to have 5 full clones (with configuration to keep 2 create now and keep 2 in spare), while controller has started cloning, one user logs in gets assigned with VM1: now the spare VMs count has decreased so controller will start cloning of another spare VM in parallel of cloning already in progress.

- 5. [#3857] Recompose will skip creating desktops which are provisioned and removed from controller but not removed from session provider.
- 6. Provisioning with Hyper-V may fail with timeout error with gold image having big disk file. Timeouts can be configured to control the failures to certain level. Please contact Accops Support for the information.
- 7. Controller may assign desktops from desktop pool associated with an inactive dedicated session provider. The issue may be observed only when users are assigned with applications and dedicated desktops both.
- 8. [#2688] HyWorks DVM Tools upgrade may fail sometimes due to timeout issue.

 Resolution: Please contact Accops Support team for increasing the timeout value in appropriate upgrade service configuration file.
- 9. [#3858] Customization does not work in following few conditions:
 - a. Master Image (Source VM) being used is an already cloned and sysprepped image. Resolution: Use a freshly created Windows VM for cloning.
 - b. The master image is Windows 10 and the apps have been altered to uninstall some of the preinstalled apps or new apps have been added.

Resolution: Please refer following knowledge base article from Microsoft https://support.microsoft.com/en-us/help/2769827/sysprep-fails-after-you-remove-or-update-windows-store-apps-that-inclu

10. Modifying the snapshot name used in Desktop pool will not be reflected automatically and thus while editing the desktop pool or recomposing desktop pool, new snapshot name should be fetched again.

Impact: New deployment or recompose may fail due to modification of snapshots.

- 11. Adding both hypervisor and its management server in same HyWorks deployment may cause configuration issues, affecting the delivery of dedicated virtual desktops. Examples of such misconfigurations are:
 - a. Configuring vCenter Server and its member ESXi servers
 - b. Configuring SCVMM server and its member Hyper-V Server
- 12. For Floating On-connect desktop pools, login may take some additional time, if target Desktop is not ready for RDP or power down (Suspended/ Powered-off)

Application and Shared Desktop Delivery

- 1. [#951] Limit concurrent sessions are applicable to the application instances instead of user sessions and thus a single user can also consume all the allowed concurrent sessions as well.
- 2. [#1902] Publishing explorer to enable folder access won't work in Shell mode. Kindly contact support for alternate way to access folders.
- 3. [#3859] Only single instance of Google Chrome, can be accessed in Shell mode. To allow multiple instances, an alternate configuration is required. Please contact Accops Support team for seeking appropriate configurations.

Back-Up Restore

1. [#527] Restoring HyWorks Controller with backed up SQL Server database may fail due to the permission on backup folder

Resolution: Manually provide the full control on the backup folder to SQL Server

- 2. [#509] New installation of controller with existing database will add the same controller entry as secondary controller server. The configuration will become unusable until this secondary entry is deleted.
 - Resolution: Delete such entry from Server -> HyWorks Controller section.
- 3. [#3860] HyWorks Controller installed with **Remote** SQL Server cannot be backed up and cannot be restored using backed up database.
 - **Resolution**: Restore the database using SQL Management studio first and then during reinstallation of HyWorks Controller use backed-up database.
- 4. [#2137] New HyWorks Controller installation on new server with backed up database may fail if the both servers are having configurational changes such as SQL Server version, authentication modes, SQL server installation directories etc.

SMTP Configurations

- 1. [#2574] Controller will fail to send backup email if controller server is using proxy configuration for internet (SMTP server) access.
- 2. Following two SMTP configurations are found not be working correctly in HyWorks:
 - a. SMTP Server and HyWorks Controllers are configured with SSL/TLS on port 465 without authentication
 - b. SMTP Server and HyWorks Controllers are configured with StartTLS on port 587 without Authentication

Workaround: None available, check if server configurations can be modified to work with authentication and configure SMTP configuration in HyWorks with appropriate username and password.

USB Redirection

- 1. [#3513] Plugging-unplugging USB devices multiple times may cause driver load issue on Virtual machine and will require virtual machine to be rebooted
- 2. [#3562] With USB Network gate, sometimes USB devices do not get redirected and shown as waiting for connection
 - **Resolution**: Launch USB Network Gate in desktop session, disconnect the device and connect again
- 3. [#3861] Composite USB Devices (USB devices which also mounts DVD drives along with their primary functions) may not work correctly with Built-in USB Redirection Drivers. Enhanced USB redirection driver can be used in such deployments.
- 4. [#3587] User session gets hang when we try multiple times connect and disconnect the device
- 5. [#3866] If accessing multiple applications from different Session Host Server, USB redirection using enhanced USB redirection driver will only function with single session host server only, on other server USB devices won't get redirected.
- 6. [#3109] Duplicate USB devices are observed on server side when redirected through HyDesk3000/4000 devices using Enhanced USB Redirection Driver

Special Characters Support

- 1. [#598] Following special characters are not supported during logon and thus should not be used by end users during logon
 - a. Mu (μ) in username

- b. French Umlaut characters ^ and °
- c. Trailing Spaces during auto-login from HyWorks Controller
- 2. [#4229] While installing controller, setup fails, if database password is using double inverted comma (")

Management Console UI Issues

- 1. [#2632] HyWorks client in some rare cases does not show application icons for applications running in Shell mode.
- 2. [#1208] HyWorks client displays notifier with application icon instead of client default icon.
- 3. [#2624] HyWorks Controller Management Console may continue to show Authentication server as active in dashboard even when its down.
- 4. [#2656] When changing the load balancing from adaptive to round robin, shared session host adaptive last score remains as it is and do not change to dash icon

File Redirection and Session Server Extensions

File Redirection

- 1. The maximum speed of file transfer using HyWorks File Transfer module is 64 kbps.
- 2. While uploading the same file from local computer, error is not displayed.
- 3. Once the file redirection transfer dialog is hidden, the exact status of file transfer is not known.
- 4. When file transfer is in progress, initiating another transfer does not show any prompt, until the first file transfer is completed.
- 5. Support for HyFr (File redirection) is not yet available on HyWorks Client for Linux or MAC. Only Windows clients support the file transfer.
- 6. File redirection from Linux VDI is not yet supported from HyLite using HyLite plugin.

HyPrint PDF Printer

- 1. HyPrint PDF printing from Linux VDI is not supported using HyLite.
- 2. [HW-551, HW-552] HyPrint generated PDF file is having all images and thus has following issues:
 - a. Size of file is greater than actual file and may take some time for processing
 - b. Text in resultant PDF file cannot be searched
 - c. File transfer and print may take some time
- 3. While using HyPrint PDF printer in plugin mode with HyLite, presence of existing dynamic virtual channel on client registry causes, printing failure.

Printing Options

- 1. [HW-553] Changing the printer from Printing Options takes few seconds to come into effect (Immediately printing may give the print job to previous printer only)
- 2. Configuration of printing preferences using Printing options is only supported with Windows Clients.

Known Issues - RMS

This section consists of currently open known issues in RMS.

Announcements

RM-4540	Column width is not properly set in the Announcement Tittle on the Dashboard and sometimes the title (large no. of chars) and contents are getting overlapped.
RM-4511	Announcement is displayed before 1 min of start time and expires before 1 min of end time
HW-1129	More than one Audit announcement can be created, and HyWorks/RMS will display the last created announcement
HW-578	While adding new announcement previous added announcement is displayed for few seconds

Courses

RM-4678	Deletion of course with too many users (300+), takes too much time and generates incorrect log entry
RM-4860	While editing course code, course code of some other existing course can be used and thus resulting in duplicate course codes in the configuration.
HW-1173	Trailing spaces in Group and Classroom field of Course are replaced by + character

Gold Master

HW-1118	Courses are not getting removed from Gold Master
RM-4851	With too many VMs in resource pool, click on resource pool in Gold Master tree view, it can take long time to load all the VMs
RM-4243	Sometimes power operation on gold master VMs fails with "Non-static method requires a target" error
RM-4799	No direct upgrade support for Gold Master DVM Tools Upgrade from RMS
RM-4240	Gold master assigned to Expired reservations are not getting deleted

Provisioning and Cloning

DM	-4542	In some cases, even after deleting the replica VM, the replica VM folder and its vmdk file	
KIVI-	1-4542	remains on VMware side.	

CSV Settings and Import Known Issue

	J I
HW-1135	On editing CSV Import profile Client group CSV folder path is always shown even if it's not checked
RM-4164	Unable to change csv settings to 'Inactive'
RM-4538	Reservation CSV cannot be imported because of error 'The value of self-study maximum number 'is invalid' even though valid max number is provided in CSV
RM-4545	Reservation CSV import fails for daily reservations when field 'Days of Schedule' is left blank
RM-4161	Unicode character are supported in 'Class Code' and 'Group' field of CSV

RM-4163	Invalid value for 'Use VDI' field should consider record as 'Fail' rather than 'not processed' [CSV]
RM-4166	Max Participant' field in Course CSV is not used anywhere but still exists
RM-4180	Gold Master CSV – Records is not getting processed if the provisioning profile is not default and having all OS type selected + multi provider configuration (CSV)
RM-4208	Incorrect failure reason provided in course csv if course code is not given
RM-4218	While Adding or updating the CSV import in the RMS Admin page, logs generated are not very detailed and useful
RM-4411	On giving invalid distinguished name pattern, while importing CSV and then adding same user from UI may result in two entries of same user.
RM-4418	Course CSV is getting imported though some special characters e.g. "-" is used
RM-4431	Wrong Validation message is showing if CSV profile name is in incorrect format
RM-4452	Reservation Creator not appear when admin create Reservation by CSV file => Now system will be used for imported reservations.
RM-4504	On importing Participant from the CSV, Participant gets added even when Email address is not provided.
RM-4505	Wrong Error message is showing if Email address format is wrong in the CSV file
RM-4535	On changing course self-study max count from Reservation CSV does not get updated on UI
RM-4311	Domain Credential gets hidden while Editing CSV import profile
RM-4439	Existing entries of CSV Configurations screen get removed, while clicking on Enable/Disable CSV in Edit CSV Settings wizard

Deployment Settings

RM-4551	Null value for 'No. Of Concurrent Deployments' by default causing reservations to not to start
RM-4480	Distorted UI for Deployment settings

USB Redirection using Eltima/SEP

	I INIA	USB redirection using Eltima or any other USB Redirection Driver is not supported in this
		release. Integrations are in progress and feature will be delivered in future release.

E-mail Notifications

RM-4855	If CSV Encoding Type selected is ISO_2022_JP, then CSV file attached in mail notifications will also use same encoding and thus may not be readable in normal text editors. Use UTF-8 for avoiding this issue.
RM-4216	Multi-Schedule reservation is not displayed properly in received mails as per in E-mail Notification Settings

RM-4475	In some case, RMS continues to send e-mails to IT admin, though the e-mail address has been removed.
RM-4555	Reservation admin's e-mail address is not being fetched and thus notifications will not work
RM-4140	Start date and time' and 'End date and time' is not displayed in mail sent on reservation creation
RM-4183	Mail settings template definition
RM-4547	Inappropriate value is being sent for Class room field email Template
RM-2574	Mail notifications will not function if proxy is configured on Controller server.
RM-4842	On reservation failure all reattempts to create reservations are notified

Provisioning Profiles

Ī	RM-4398	Sometimes provisioning profile deletion failed showing error for association with gold
	KIVI-4590	master while the Gold master was already deleted

Reservations

End time of one-time can be saved as less than current time while editing the reservation.
Creating course self-study for courses with no end does not display /block course duration on calendar view
Max duration validation for Course self-study is not used if course self-study extends into next day
Even when failure conditions will be repeated, controller attempts to create reservation three times e.g. reservation from snapshot which is deleted from backend.
'Deploy Now' button displayed for course self-study reservation for RMS admins
Expired/ Cancelled reservations are not getting deleted from RMS automatically.
Course self-study more than ' Maximum Units to be Used' can be created
In Reservation wizard, the time shown during 12:00AM to 06:00 AM is not current.
Validations e.g. Max Units to be used etc. are not yet integrated and thus no restrictions will happen. Other Issues: #4556, #4445, #4013, #4011, #4008, #3991, #3962
Incorrect 'starts in' time displayed on participant login for a reservation if 'allow connect before reservation time' is configured.
With specific time window, controller may attempt to create all reservations at a time and reservations may be picked randomly.
Reservations go into running state post Redeploy Operation.
Allow Connect before reservation starts will not work for Self-study and Course-self - study reservations

RM-4528	Sometimes deleted reservation are removed from RMS but associated desktop pools are not removed from HyWorks and the DVMs are not deleted from provider.
RM-4456	The 2nd schedule of reservation may skip when deployment time is greater than time span between schedules.
RM-4453	Search by date criteria is not working on Self-study reservation page by participant
RM-4448	Sometimes reservations are not getting triggered on time or not getting prepared or expired. The issues are not very frequent but being monitored and rectified. #4295,
RM-4447	Course self-study is extended after course reservation expiry
RM-4401	After completion of one schedule in case of multi-schedule number of units to be used are changed
RM-4388	Course reservation is not reading default reservation settings when extension is not allowed in reservation
RM-4366	On editing one-time schedule able to change the start time and can enter previous date
RM-4359	Invalid displayed in dropdown 'reservation for' when editing Self-study by participant
RM-4357	Course self-study reservation can be created before the start date of course reservation
RM-4261	On cancelling one-time reservation, it asks cancel reservation for this occurrence or whole series
RM-4226	In some rare cases, connect button is provided to user even if VMs are in configuration mode.
RM-4105	On excluding members from course number of units to be used doesn't get updated
RM-4055	Re-click on Save button on Reservations page may end up creating two instances of reservations.
RM-3970	On Self-study reservation page edit GM, date and time is not working properly
RM-3951	Self-study Reservation is running at RMS admin side but at participant side because of time and date mismatch it is not showing running
RM-3892	While saving Reservation without performing anything gives object reference error
RM-4646	Created two entries, when create course self-study with schedule is Start Date - 2018/03/11 Start Time - 23.00 End Time - 01.30am
RM-4614	Self-study conflict not working, for new self-study reservations the conflicts are not shown
RM-4613	Course self-study checks conflicts with other reservations (other course self-study reservation) not with parent course reservations
HW- 813/HW- 814	While adding two recurring schedules with no end date, conflicting schedules can be added.
	After schedule end, reservation VMs can be shown as powered on.
HW-801	[Resolution] No work arounds available. The VMs are powered off and but as the desktop pool is inactivated, the desktop status is not updated.

RMS – Portal and Browser

RM-4834	On logging on with a different user in different tab of browser or different instance of same browser, the old user session will start using new user's cookies. All actions being done by old user now will be logged and acted as the new user.
RM-4537	On License expiry of HyWorks, no user-friendly errors are shown on HyLite login.
RM-4506	Tab name is not displayed on edge when logged in through HyLite
RM-4496	Login from HyLite shows distorted UI on Edge browser
RM-4436	Sometimes, while logging in with different users from same browser, none of the controls are displayed (Deleting cookies solves the issue)
RM-4680	Sometime, while logging-in from the HySecure, HyWorks Controller is giving Error "Server is trying to reorganize resources".
RM-4089	Provisioning profile/ Deployment Settings pages are being reorganized to solve some overlapping issues.
RM-4666	Not a very user-friendly error message is shown when Super Admin is trying to login into RMS Console.
RM-4663	Search on power state (Shut down) is not working on Gold Master page

USB Redirection – RMS – Known Issues

RM-4606	USB Redirection is not supported with any other browser than Chrome
RM-4645	USB Redirection is not supported with following VDI desktops 1. Windows 7/8/8.1/10
	2. Ubuntu 16.04x64 – Installed with HyWorks DVM Tools RC5 packages
	3. Ubuntu 7x64 – Installed with HyWorks DVM Tools RC5 packages
-	Only single USB device is supported at a time. Using more than one USB device can affect the performance badly and sometime may stop functioning.
-	Interchanging USB device into different USB ports may cause USB redirection to stop functioning.
RM-4581	Hyprint gives slow response(10kbps), while Eltima is also being used for USB redirection
-	USB mapping and read/write is slow with HyLite comparing to USB redirection with direct RDP session
-	With existing virtual channels (Addins), HyLite will not be able to detect installed Accops RDP Extension Plugin. Please refer section Prompt to Download Native Client IS DISPLAYED Though Installed for troubleshooting the issue.
-	Installation of Accops RDP Extension on client machine fails when RDP sessions are running. Resolution: Disconnect any running RDP sessions. Refer section Error While Installing Accops RDP Extension Client Full for detailed information.

Known Issues - Linux VDI

	Supported Linux VDI Supported Linux OS and Flavours:
	Ubuntu Gnome x64-16.04.3
-	CentOS Gnome 7x64 -1708
	No other Linux Flavours are supported.
RM-4029	When applications are launched in Linux desktop minimize maximize button are not present
RM-4246	"Choose password for new keyring" dialog box is prompted when launch web browser application in Linux VDI
RM-4247	Sometimes on Linux VDI VMs, "Clock skew detected with active directory" error is prompted, when it is unable to connect to domain controller
	Make sure Linux VDI time is synchronized with the AD.
RM-4033	Linux VDI is not closed when left idle for specified time – Inability to monitor running remote session results in failure to disconnect/logout sessions but this will be governed by Controller timeouts.
RM-4405	Importing multiple Linux VDI VMs (Accops provided images) in to dedicated session provider may cause connection and AD issues (If joined to domain) due to common hostname
RM-4645	USB redirection through Eltima is functioning but may not work intermittently. Support for different types of USB devices is under development.
	On session disconnections, the USB devices are not reconnecting appropriately
-	Resolution: Reboot the DVM and connect again. The problem should be solved.
RM-4623	Shared drives are not directed in XRDP 0.9 version with error dialog box
RM-4587	Linux VDI customization is failed, when multiple network cards are present on Linux VDI VM
	CentOS DVM Tools upgrade from Controller is not supported
-	 The issue will be resolved in latest CentOS DVM Tools. Which will support the upgrade to future versions.
-	Changing the deployment environment (e.g. package installation is done for LDAP but being used in AD) may not function correctly. It is required to select appropriate deployment mode during installation and use VM in the same environment.
-	Desktop session timeouts will not function, and only controller generated session management will work
-	First RDP to freshly cloned Ubuntu dedicated desktops joined to domain may get failed. [Workaround] Second login should work fine or if the machines are left for some time the connections should work fine.

Known Issues – Linux SHD

-	Supported Linux Flavors
---	-------------------------

	Only Accops provided Linux Image will be supported for this release
HW-1297	Workgroup environment support is not fully automated, and all workgroup users should
	be created locally on Linux SHD servers.
	Resolution: Contact Accops Support team for assisting in creation of users on Linux SHD servers.
HW-908	Windows RDS Servers can be added in Linux SHD category
-	Only one user session per Linux SHD server is allowed, and thus if multiple apps are published from single server then accessing the second application will not open another app but will relaunch the existing session.
	However, the above should be avoided and only single application per server should be published.
HW-1191	Linux SHD is not getting opened in Full Desktop by default
	[Workaround] Use following additional command line parameter
	For Windows (RDP): screen mode id:i:2
	For HyDesk/Ubuntu Client: /f
	⇒ The user experience has been improved in GA and the issue is fixed in GA release.
HW-1192	Reconnection of existing Linux SHD session takes 20+ seconds to show the desktop until then black screen is displayed on Linux Clients
	⇒ On windows clients the experience is better than Linux based clients.
-	Exception (Error) will be displayed, while adding Linux RDS server, because of monitoring service.
	⇒ The error should be ignored.
-	Restricting single application per server is now allowing reconnection of the application
-	Session from HyLite (For HySecure version <5200) will not work for existing HySecure versions. Latest HySecure (v5200 or later) should be used.
	Monitoring of Linux SHD server resource (CPU/Memory/HDD) using monitoring service is not supported. Hence Adaptative load balancing will also not work,
-	Applications are supported in SHELL mode only and thus appropriate connection profiles with <i>Application Launch Mode</i> set as Shell and <i>Session Experience Option</i> as Never Seamless
	For using Linux SHD and Apps, latest Windows Client RC6 or above (having shell support) should be used.
-	Multiple Windows SHD features e.g. Application Working Directory, Session Shadowing, Diagnostics Support, Virtual IP are not supported.
-	Support for showing wait messages is not yet provided
-	Linux SHD does not support internal session timeouts monitoring. All session control is done using HyWorks Controller, which means once a session is established from authenticated client, the Linux SHD/App sessions will continue to run, until
	User session gets timed outUser itself logs out of HyWorks Session

	Until administrator removes Linux SHD/App session from HyWorks Controller
-	Linux Dedicated/ Shared: If a user exists locally and same user exists on AD, then the remote session may fail to authentication user correctly, causing session failure.
-	Browse and get details of application is not supported with Linux SHD
HW-1039	Session removal of Linux SHD server for multiple sessions at a time may get fail with exceptions

Known Issues Endpoints

HyWorks supports following endpoints as per requirement and endpoints should be used wisely with understanding the below mentioned known issues:

HyLite – HyWorks Integration

- 1. [#3862] HyLite application/desktop connection gets logged out immediately on FIPS enabled Session Host Servers.
 - **Resolution:** Please enable Use CredSSP Flag in connection profile -> Protocol Security section
- 2. [#3863] Users will not be able to change desktop wallpaper while working with HyLite in full desktop of shared VDI
 - 1. [#2387] Copy\Paste operation not working using menu tab for the first time **Workaround:** For the first time, use the shortcut 'Ctrl + V' option to paste the copied data.
- 3. [#3864] HyLite + HyWorks Known Behavior/Issues
 - a. SHD reconnect does not happen automatically and user should click on SHD desktop icon
 - b. If user reload the browser tab in which applications are running, then session will be logged out
 - c. If user reloads the browser on application tray page, warning dialog will be displayed, and all opened application/desktop sessions will be logged out.
 - d. Remote session screen in browser does not match with browser screen and thus if user minimizes the application, it may not be visible. The condition can be overcome by resizing the browser or user can use shortcuts Alt + PageUp/ PageDown to switch between the opened applications.
 - e. HyLite may not provide exact error in misconfigurations of HySecure and HyWorks e.g. if Organization is marked as inactive but configured in HySecure -> While logging in user selects the inactive (in HyWorks) organization, the HyLite will display error for Organization mismatch.
 - f. Performance on Internet explorer is not as good as compared to Google chrome.
 - g. With multiple VDI assignments, HyLite portal won't start automatic syncing of desktop statuses from controller and will initiate statuses only after user click on any of assigned desktops.
 - h. HyLite, by default sends heartbeat in every 5 minutes and thus user session idle timeout should always be greater than 5 minutes.

- If unsaved files are opened in applications and user logs out the session using Sign-out button of HyLite, the session does not get signed out completely and remains disconnected
- j. Application Auto-launch configuration is not supported with HyLite and application access is only supported through manual click on App/Desktop name
- k. Microsoft Excel application may go into hang state while accessing it from HyLite on IE browser.
- I. Application sessions in Remote App mode on switching to full desktop mode will display white bar on the bottom
- m. Windows shortcuts does not work in full screen mode in HyLite.
- 4. [#1720] Application Auto-launch will not function when being accessed from HyLite, the feature works fine with HyWorks Clients.

Common Known Issues (Platform Independent)

- 1. "Windows login" function does not work in HyWorks Client v3.0. The feature will be reintegrated in future versions.
- DVM Power Policies in DVM Pool may conflict with Auto-login (Auto-login will keep the
 machine powered-on whereas power policy may try to power-off the DVMs). Administrators
 are required to keep power policies as default or disabled in DVM pools if intending to have
 auto login on registered devices

Windows Client and Hy3020

- 3. Users will be shown with error 'No desktops or applications are assigned to this client' in following conditions:
 - a. No active reservations are running
 - b. Active reservations are running, but not accessible due to client group settings
 - c. All reserved VMs are already consumed
- 4. Two devices with same name will be registered when a full client and lite clients are used from same windows desktop.
 - a. Device with same name already exists in HyWorks Config error is coming when we install two different window clients on same device [#3098]
- 5. Client uses icon of last accessed app when option "Always combine, hide labels" for Taskbar button is selected

Resolution: Auto-login (Device Settings/ Organization Settings) should be disabled.

- 6. HySecure installation on Windows 7x64 Enterprise does not work and on Windows 7x64 Ultimate it will require additional installation of Microsoft security patch (<u>KB3033929</u>).
- 7. HyWorks Client will not work, if it is first accessed using HySecure Client and then attempted to function independently.

Workaround: Quit the HyWorks Client and then launch again to work without HySecure Client.

8. On desktop or laptops, where client is installed with eltima and new setup is run to upgrade without selecting Eltima. On first login client will be exited, suggesting change in USB redirection driver.

Resolution: Re-login should work fine. This happens due to change in configurations due to options selected during installation.

HyWorks Client connecting though HySecure Gateway

- 1. On Windows 7 platforms, when connecting via HySecure gateway, HySecure application may crash in following scenarios:
 - a. Login with user having OTP enabled and controller is not reachable
 - b. When virtual desktop session is in progress

The crash is not consistent and even may not occur in every situation. But it may affect the user logon or connected sessions.

Resolution: Exit the HyWorks Client completely (System tray icon – right click and select option *Exit*. Re-launch the client and re-login.

- 2. No direct remote connections will function, the feature works when HySecure and HyWorks clients are used in integrated mode.
 - a. Only HyWorks assigned applications or desktops can be accessed, HySecure specific apps e.g. Web applications, remote meeting, network-based applications cannot be used.

HyDesk (Hy3000/ Hy4000/ Hy3020/Hy2000) Known Issues

- 1. Multimonitor functionality does not work for applications in Shell Mode
- 2. Application access on Hy3000/Hy4000 works only using specific connection profiles. Please contact Accops support team for detailed information on the possible connection profiles.
- 3. Using Controller over WAN/Internet: Running application sessions in Remote App mode get disconnected on trying to access next application, all applications will be reconnected on next click.
- 4. In some cases, no errors are displayed on client side when connection to assigned desktop or application fails, even on controller the logs will show that desktop/app was connected and then logged out.
- 5. App Sessions are not supported in KIOSK mode of Hy3020.
- 6. In Hy3000/Hy4000, HyWorks Client login screen sometimes appear on the corner of the screen.
- 7. Duplicate USB devices are observed on server side when redirected through HyDesk3000/4000 devices using Enhanced USB Redirection Driver
- 8. If accessing multiple applications from different Session Host Server, USB redirection using enhanced USB redirection driver will only function with single session host server only, on other server USB devices won't get redirected.
- Enhanced USB Redirection Driver is not supported with RDP10 protocol on Hy3000/Hy4000 devices. [#3196]
- 10. Applying touch screen driver settings on Hy3000 devices, results in client crash and client must be re-initiated. [#3167]
- 11. Performance will be degraded if multiple applications in RemoteApp mode are accessed simultaneously.
- 12. Skype application does not work on Hy3000/Hy4000 HyDesk endpoints.

- 13. HyWorks PDF Printer cannot be disabled on Hy3000/Hy4000 devices using flag in connection profiles. (Flag is Allow RDP Plugins in local resources.)
- 14. When using "Use Built-in Credentials" Session with protocol RDP7 few special characters are not working and causing session connection issues. One such special character is "&". More characters to be identified and published.
- 15. HyWorks PDF Printer does not work with RDP7 protocol on client side.
- 16. Enter key does not work as expected to submit the username and passwords on HyWorks Client Login screen, instead space can be used.
- 17. Closing a single app in remote app mode, closes all running applications on HyDesk Hy3000/Hy4000. [#2157]
- 18. HyWorks Client on Hy3000 may move to hang state for a brief period when language\virtual keyboard\Touch screen setting are applied. [#2672]
- 19. If sessions are invoked from windows desktop machines configured with sleep timers -> User session not going back to active session after large inactivity time and machine is went into sleep mode and been re-invoked.
- 20. Session over proxy from Hy3000/Hy4000 device is not working with RDP7 protocol. [#3199] **Resolution:** Protocol RDP8/RDP10 to be used for best of experience and session over WAN/Internet.
- 21. Printing using HyPrint PDF Printer does not work on Hy3000/Hy4000 devices with RDP7 protocol **Resolution:** Protocol RDP8/RDP10 to be used for HyPrint PDF Printing on HyDesk Hy3000/Hy4000.
- 22. Caps-lock button is not working in Virtual Keyboard with Japanese keyboard layout [# 293]

HyDesk Hy2000 - v256228

- 1. HyDesk Hy2000 v256228 release has minimal support for HyWorks v3.0+ Controllers
 - a. Only Dedicated VDI and Managed Shared Hosted Desktop Delivery supported
 - b. Hy2000-v256226 does not support any advance features of HyWorks v3.0-SP1
 - No organization support and Hy2000 devices will be registered in Default Organization only
 - ii. No support for Application delivery
 - iii. RDP10 is not yet integrated in HyDesk Hy2000 -> Only RDP8 and RDP7 (Minimal support) is supported
 - 1. Hy2K >> Session over proxy from HyDesk Hy2000 does not work with RDP-7 protocol and thus RDP8 should be used.
 - 2. Hy2K >> RDP7 protocol has minimal support and should be used only for troubleshooting on the advice of Accost Support team
- 2. Hy2K >> Device power-on operation from controller is not supported on Hy2000 model
- 3. Hy2K >> Multi-touch/Single-touch devices are not supported on Hy2000 devices.
- 4. Hy2K >> German/French umlaut characters are not yet supported in username/passwords and may result in login failure
- Hy2k >> Disconnected sessions will be removed but will not be logged out on re-registration of the device -> This may affect the temporary assigned pools and some session management tasks [# 3285]
- 6. Hy2K >> Switching the protocol on device is showing an error in logs of controller [# 3284]
- 7. Hy2K >> Virtual Keyboards for foreign languages (Japanese and German) are not integrated.

HySecure Client + HyWorks Client (HySecure in front)

1. Logging-in with HySecure client with Auto-login enabled on HyWorks may cause issues, while accessing applications or desktops.

Resolution: Auto-login (Device Settings/ Organization Settings) should be disabled.

2. Power management is not optimized on HySecure Client comparing to standalone windows client and thus may not give the best of user experience.

HyWorks Client for MAC OS

- 1. Only following versions of MAC OS are supported:
 - a. El Capitan:10.11.x,
 - b. Sierra: 10.12.x
 - c. High Sierra: 10.13.x
- 2. Applications delivery in Remote App mode is not supported (Only Shell mode is supported)
- 3. USB Redirection using any of the USB redirection driver is not supported
- 4. File redirection/ HyPrint using Session Server Extension is not supported
- 5. Session expansion over multimonitor is not supported
- 6. Announcements are supported but only 7 lines of announcement will be shown, and last line may cut little bit or overlap.
- 7. Not all connection profile parameter works and may cause session failure and thus should be correctly configured.
- 8. Cross platform session reconnection does not work, which means,
 - a. SHD or app session initiated from HyWorks Clients on Windows or Linux may not work correctly when reconnected from HyWorks Clients on MAC and vice versa.
- 9. [CLIEN-332] User login fails with error "error code:3"; once user tries to login after changing the password from password change dialog shown due to password expiry.
- 10. [CLIEN-574] Audio/Video/Microphone performance is not good comparing to Windows/HyDesk devices.
- 11. [CLIEN-715] The remote sessions being initiated from MAC clients cannot be controlled and thus HyWorks Client on MAC will fail to manage sessions or notify controller about session status Impact: Dedicated VDI session connections or disconnections will not be notified and thus controller will only be able to manage sessions using user sessions.
- 12. The feature of logging out user automatically (showing dialog of disconnecting session in 60 seconds), after user (assigned with only one desktop or application) disconnects/logs-out the remote session.

HyWorks User Portal

- 1. HyWorks User Portal is having a minimal support and should not be used. HyWorks v3.2 SP1 release will have improvised support for HyWorks User Portal.
- 2. HyWorks User Portal is not available by default and it must be enabled from backend using specific process. Please check Appendix A for more details.
- 3. If user is having only single desktop assigned but restricted by client group, then login will be failed
 - a. However, if user is having more than one desktop or apps assigned then after integrated allowed client logon, the restricted desktop will also be visible.

- 4. Announcements or Client groups are not supported with HyWorks User Portal and thus following issues may be observed:
 - a. Announcements enabled controller may not work
- 5. Dedicated Desktop Power Management is not completely integrated and does not give best of user experience to the user if assigned desktop is powered off or suspended and requires power operation from user side.
- 6. If the client is being used independently and then being invoked by HyWorks User Portal, then it may not function correctly, and user must completely exit the HyWorks Client before reattempt to login from HyWorks user portal.
- 7. If DVM is assigned to device, and user logs in using HyWorks user portal, the virtual machine won't be displayed as its assigned to devices running in backend)
- 8. While accessing Shell based application from user portal, icons for all apps will be shown as default shell icon only
- 9. Using User Workspace Portal from different browsers on same machine may cause crash of HyWorks Client and thus should be avoided.

Support

Contact Accops Support team (support.accops.com) for any assistance or queries.

About Accops

Accops Systems Private Limited. under "Accops" brand is a globally leading developer and provider of Enterprise Mobility solutions involving Application and Desktop Virtualization, Secure Remote Access and Privilege Access Management solutions.

Accops' s software and hardware products enable businesses to efficiently virtualize, secure and deliver business applications, corporate workspace and network services to their employees, partners, vendors, home users and mobile users, enabling instance access from anywhere using any device.



Accops, HyWorks, HyDesk, HyID, HyLite, HySecure and HyAssist are registered trademarks of Accops Systems Private Limited. Other names may be trademarks of their respective owners. Accops System has the right to change, modify, transfer or otherwise revise the publication without notice.

Tel: India +91 9595 277 001 | Europe +49 341 3315 78 30

Email: sales@accops.com | Web: www.accops.com

Copyright © 2017, Accops Systems Private Limited. All Rights Reserved.