

Accops HyWorks v2.5

Migration from skySpace to HyWorks GA SP1

Accops 6/3/2016

Document describes the steps required for Migration from skySpace to HyWorks GA SP1 for smooth transition from skySpace and with less manual efforts.

Document Revision History

Date	Changes
29-Feb-2016	First draft on Beta release date
16-Apr-2016	Updated to incorporate GA release
03-June-2016	Incorporated changes as per SP1 release

Release History

Release Version	Release Date	Type of Release
2.5 Beta	29-Feb-2016	Pre-GA release for partners and customers
2.5 GA1	18-Apr-2016	GA Release
2.5 GA SP1	03-June-2016	SP1 Release (General Available)

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INTRODUCTION

This document describes the process of migrating devices and DVMs to HyWorks environment.

WHICH BUILD SHOULD I USE?

HyWorks v2.5 SP1 is the latest release from HyWorks and should be preferred over any other previous releases.

GETTING HYWORKS

• For downloading individual HyWorks components please refer section Module Versions

MODULE VERSIONS

The table below lists all the important modules of HyWorks released in HyWorks GA.

Module	Version	Remarks	Download location
HyWorks Controller + SP1	2.5.0.172 – SP1	Not compatible for upgrade with any previous versions of skyControl Server. skyControl server and HyWorks Controller can be installed and run on same machine for ease of migration and avoiding extra server requirement. Introducing HyWorks Controller Helper for easy configuration of HyWorks Client patches into respective directories.	HyWorks Controller Setup + SP1 Zipped File Download Here
SP1 Patch (For existing HyWorks Deployment)	2.5.0.172 – SP1	To upgrade existing HyWorks deployments having Controller version 2.5.0.172	SP1 Patch for HyWorks Controller
skyTools (Upgrade to HyWorks)	2.1.1.20	To be kept on skyControl server for migration to HyWorks. Integrated in skyControl Helper v2.1.2.1 - Refer document "Migration from skySpace to HyWorks GA SP1" for detailed information.	NA – Bundled with skyControl Helper. skyControl Helper SP1 v2.1.2.1 Download Link
skyPoint TS100/TS150 Hotfix (Upgrade to HyWorks)	2.5.6029.256033		
skyPoint TS300 Hotfix	2.5.5173.255174		

(Upgrade to HyWorks)			
skyPoint TS200 Hotfix (Upgrade to HyWorks)	2.5.5367.255367		
HyDesk Hy2000 Client Upgrade (Must be kept in HyWorks Controller)	2.5.5173.255174	In 7Zip format, bundled with HyWorks Controller SP1 patch. Run HyWorks SP1 setup to place HyDesk Upgrade files on HyWorks Controller GA v2.5.0.172.	
HyDesk Hy3000 Client Upgrade (Must be kept in HyWorks Controller)	2.5.6029.256033		NA – Bundled with HyWorks Controller Helper.
HyDesk Hy4000 Client Upgrade (Must be kept in HyWorks Controller)	2.5.6029.256033		HyWorks Controller SP1 Patch Download Link
HyDesk Hy3020 Client (EDCUPDATE.zip)	2.5.5367.255367		
HyWorks Client for Windows	2.5.5367.255367	Setup can be used to installed HyWorks Client on windows to enable Windows desktop as valid device.	Windows HyWorks Client Setup Download Link
HyWorks Tools	2.5.4.1	Same as GA. Available as Downloads from HyWorks Controller Management Console	NA – Bundled with HyWorks Controller
Built-in USB Redirection – Eltima (Bundled in HyWorks Tools)	6.2.835	See Information above.	NA – Bundled with HyWorks Tools
Hyper-V Connector	2.5.4	Required for enabling Hyper-V/ SCVMM Server as DVM Provider for HyWorks VDI environment Same as GA release.	HyWorks Hyper-V Connector Setup Download Link

MIGRATION PROCESS

For successful migration to HyWorks from skySpace, administrator should follow the below specified process:

- 1. <u>Install HyWorks Controller</u>
 - 1.1. Install SP1 Patch on HyWorks Controller
- 2. Upgrade Devices
- 3. Install HyWorksTools v2.5 on DVMs

Let us configure each of these modules in the below section of the document.

HYWORKS CONTROLLER

The HyWorks Controller can be installed on the same server running old skyControl server or it can be installed on a fresh Windows 2008R2 or Windows 2012R2 server.

INSTALLING HYWORKS CONTROLLER

- 1. Download the software from the download location mentioned in section Module Version and follow the steps provided in install guide.
- There are no significant changes in the install process of HyWorks Controller v2.5 Beta compared to skyControl previous versions in 2.0 and 2.1 series. Please refer *HyWorks Controller Installation Guide* for detailed instructions.
- Once installed successfully, HyWorks Controller Management Console is available on port 443 by default if not configured on any other port during installation. E.g. <a href="https://<IP/Host name of HyWorks">https://<IP/Host name of HyWorks Controller>:<Port Number (default:443)>

Note: When installing HyWorks Controller in parallel with skyControl GA3 or older, HyWorks Controller Management Console port will be required to be configured on other than port 443. skyControl Management Console might have been used 443 already.

Now HyWorks Controller is successfully installed. The next step is to run *HyWorks Controller SP1* patch, which will configure the latest HyWorks Client patches on the HyWorks Controller. Next section is having detailed information about HyWorks Controller SP1 patch.

SP1 PATCH FOR HYWORKS CONTROLLER

In GA SP1 release of HyWorks, SP1 patch is released which consists of following changes along with HyWorks Client patches:

- HyDesk Hy2000 Client
- HyDesk Hy3000 Client
- HyDesk Hy4000 Client
- HyDesk Hy3020 Client
- SP1 Patch: Correcting Model Number to Hy3020 (from Hy3200)

IMPORTANCE OF HYWORKS CONTROLLER HELPER

> SP1 patch on successful execution correctly places the client upgrade files in their respective locations.

When devices being upgraded from skySpace environment connects to HyWorks Controller, they try to download a client patch from HyWorks Controller and if appropriate version file (i.e. appropriate HyWorks Client patch and info file) is not found the devices will continuously attempt to download the client patch

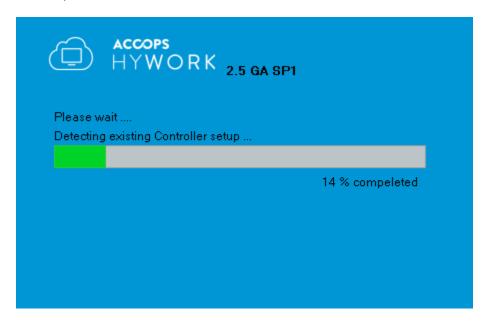
from HyWorks Controller and thus it is very important to run HyWorks Controller Helper utility after installing HyWorks Controller.

> SP1 patch will be used to correct the model number from Hy3200 to Hy3020.

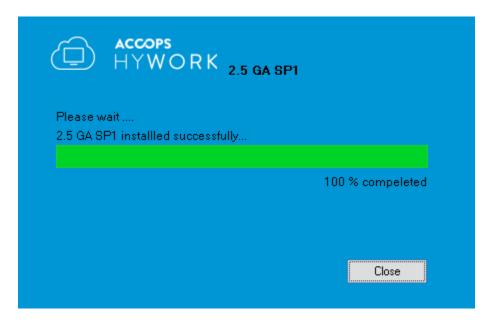
INSTALLING SP1 PATCH

Follow the below steps to run HyWorks Controller Helper utility:

- 1. Download 'HyWorks Controller + SP1' zip file (Download link is available in Module section) on server to be configured as HyWorks Controller
- 2. Extract the files and install HyWorks Controller as explained in section HyWorks Controller
- 3. Once HyWorks Controller is installed successfully, invoke SP1 install wizard by double clicking on HyWorks Controller Helper utility setup i.e. **GA2.5SP1.exe**, downloaded with HyWorks Controller
- 4. In HyWorks Controller SP1 installation wizard, installation will start as soon as administrator invokes the setup



5. Once installation is completed, successful installation message will be displayed and *Close* button will be enabled. Click on *Close* button to exit the installation wizard.



- 6. HyWorks Controller SP1 execution on HyWorks Controller server performs following operations:
 - a. Place following HyDesk Upgrade Patches in their respective directory
 - i. Hy2000
 - ii. Hy3000
 - iii. Hy4000
 - iv. Hy3020
 - b. Corrects the info files for the above specified HyDesk devices to point to latest version so that if administrator initiates upgrade, it will download only the correct file and also devices being upgraded from skySpace will get appropriate 7Zip format upgrade patches available on the HyWorks Controller.
 - Correcting the model information on dashboard and database for Windows Thinclient i.e.
 Hy3020 now.

Now successful setup of HyWorks Controller with SP1 patch is completed, next step is to migrate devices from skySpace to HyWorks. See below section for detailed instructions.

UPGRADING SKYSPACE DEVICES TO HYWORKS 2.5

Once HyWorks Controller with SP1 patch is successfully deployed in the network. The next step is to upgrade the device currently deployed in skySpace environment for migration to HyWorks.

UPGRADE MECHANISM

Devices will be upgraded using older skyControl server using an upgrade patch, which will uninstall the older skySoft from the devices and will install new Accops HyWorks client on them. The later part of this section will provide detailed steps on how to upgrade TS100, TS150, TS200 or TS300 devices.

TS100/ TS150 Devices:

In skyControl GA3, models TS100 and TS150 both get registered as TS100 only and thus administrator can upgrade both types of devices following the same steps as provided below.

Important to know: In Accops HyWorks Controller, TS150 devices will be registered with Model as Hy4000.

UPGRADE CANDIDATES

In this release support for old TS100, TS150, TS200 and TS300 has been added and thus these models are only eligible for migration to HyWorks environment.

Windows Client: skySoft on windows should be manually uninstalled first and then HyWorks Client should be installed in order to migrate to HyWorks.

PRE-REQUISITES

- 1. skyControl server GA3 (version 2.1.70.16051) is up and running in the environment (As mentioned earlier also HyWorks Controller can be installed on the same machine)
- 2. Devices (TS100, TS150, TS200 and TS300) are up and connected with skyControl server, running appropriate compatible version.
- 3. skyControl Helper v2.1.21 is downloaded on skyControl server

UPGRADE PROCESS

For upgrading, TS100/TS150/TS300 devices to Accops HyWorks environment follow the below steps:

- 1. Disable Auto Update on all devices: To avoid accidental upgrade on all devices
- 2. Execute skyControl Helper (SP1 v 2.1.2.1) on skyControl server
 - a. Places all device upgrade patches on skyControl server
 - b. Places a pre-defined info files on skyControl server
 - c. Places skyTools v2.1.1.20 on skyControl server
- 3. Enabling Auto Update on intended devices

The details of each step are provided below.

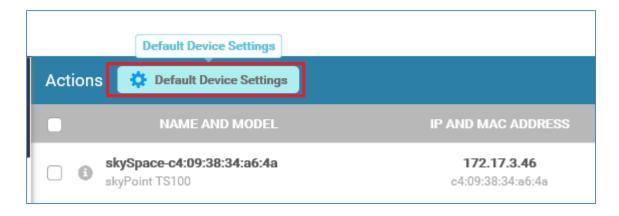
Note: It is strongly advised to upgrade one device at a time and on successfully migrating to HyWorks environment, upgrade others.

DISABLING AUTO UPDATE FOR ALL REGISTERED DEVICES

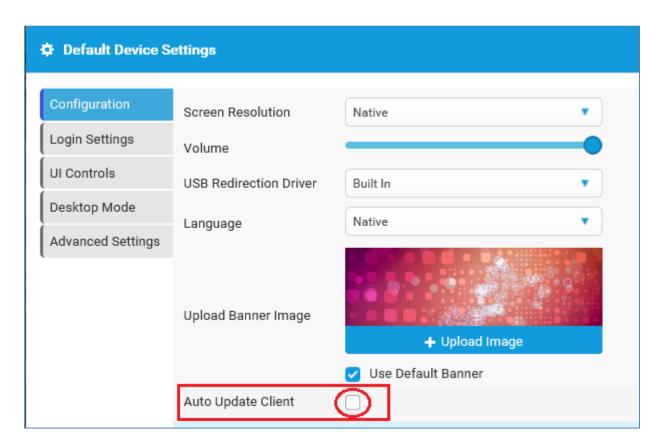
As per above note, to avoid unintentional upgrade of any undesired device, administrator should first disable the upgrade in Default Device Setting and then disable the Auto Update on individual devices.

a. Disabling Auto Update in Default Device Settings

- i. Follow the below steps to disable Upgrade in Default Device Settings
- ii. Login to skyControl Management Console using appropriate admin credentials
- iii. Go to Devices tab
- iv. Click on Default Device Settings button



- v. In Default Device Setting dialog -> Configuration screen
 - a) Uncheck the Auto Update Client option as shown in below screenshot

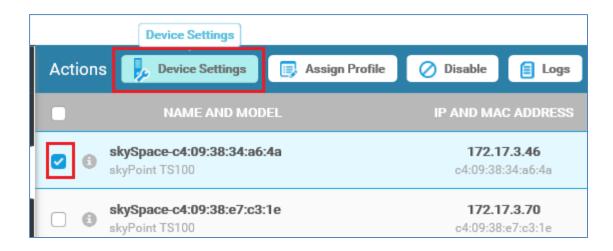


Now we have successfully disabled the Auto Update Client settings in Default Device Settings. It is equally important to recheck Device Settings of all the registered devices to avoid unintentional upgrade.

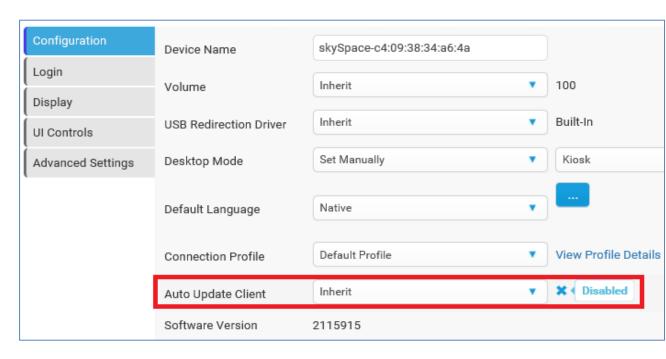
b. Disabling Upgrade in Device Settings for Different Devices

For disabling Auto Update on different devices, administrator will be needed to follow the below steps:

i. Select single device in Devices tab and click on Device Setting button



- ii. In Device Settings dialog -> Configuration screen
 - a) Verify the Auto Update Client dropdown is selected as Disabled or Inherit (Inherit if Default Device Settings are already disabled)
 - b) If it is enabled, select option Inherit and click on Save button to save the settings



iii. Repeat step# i-ii for all registered devices.

EXECUTING SKYCONTROL HELPER V2.1.2.1 FOR COPYING THE TS100/TS150/TS200/TS300 SKYSOFT HOTFIX ON SKYCONTROL

Follow the process mentioned below to enable the hot-fix for skySoft (software running on skyPoint devices). The hot-fix needs to be placed on skyControl server.

- a. Download the skyControl Helper setup v2.1.1.0 package from the below download link.
 - skyControl Helper Download Link
- b. Invoke skyControl Helper Setup wizard by double clicking on HyWorks Controller Helper utility setup, downloaded with HyWorks Controller
- c. In skyControl Helper setup wizard
 - i. Click on Next button on Welcome screen
 - ii. Click on I Agree button on License screen
 - iii. Click on Install button on Select Components screen
 - iv. Wait for setup to execute
 - v. Helper execution is completed Click on Finish button to close HyWorks Helper setup wizard
- d. skyControl Helper execution on skyControl server make changes for the following components.
 - 1. TS100
 - a. Place TS100 skyPoint Upgrade hotfix (v2.5.6029.256033) in their respective directory
 - b. Update the Info file with filename to use latest hotfix and version as 2115912 (greater than skySpace GA version 2115911)

Note:

 If devices running in environment are having version greater than 2115911 then Info files must be updated manually to have version information greater than the current version of the devices.

2. TS150

a. In skyControl Server TS100 and TS150 both were getting registered as TS100 and thus the changes being suggested for TS100 applies to TS150 also with the only difference that, after upgrade to HyWorks, TS150 will be registered as Hy4000 and TS100 will get registered as Hy3000.

3. TS300

- a. Place TS300 skyPoint Upgrade hotfix (v2.5.5173.255174) in their respective directory
- b. Update the Info file with filename to use latest hotfix and version as 2115945 (greater than skySpace GA version 2115943)

Note:

• If devices running in environment are having version greater than 2115911 then Info files must be updated manually to have version information greater than the current version of the devices.

E.g. if TS300 device is running with version 2.1.15911. 2115917 then make the Version greater than 2115918

4. TS200

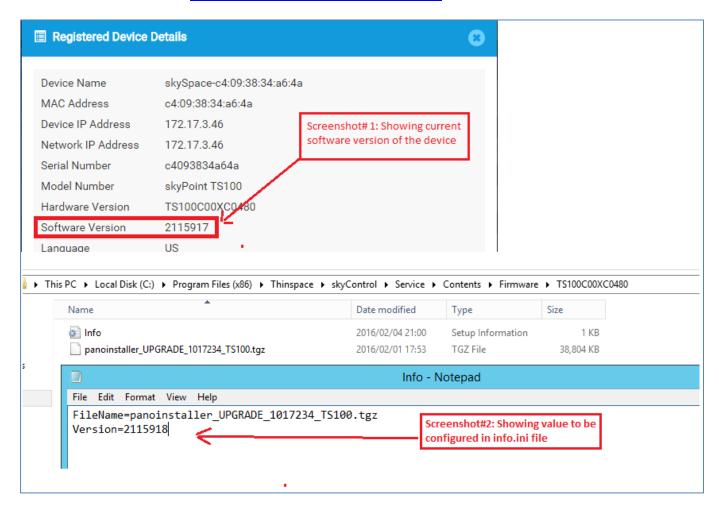
- Place TS200 skyPoint Upgrade hotfixes SKYUNLOCK and SKYUPDATE in their Respective directory
- b. Update the info file with filename as SKYUNLOCK and version as 2116039(Greater than skySpace GA version 2116038)

Note:

• If devices running in environment are having version greater than 2116038 then Info files must be updated manually to have version information greater than the current version of the devices.

5. skyTools

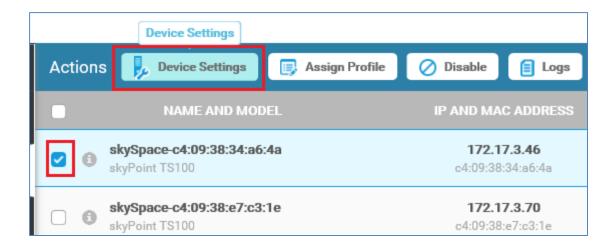
- a. skyControl Helper execution will also place latest skyTools updates v2.1.1.20 on respective folder
- Placing the skyTools updates in skyControl server, will initialize HyWorks DVM
 Agent initialization on the DVMs. See the detailed information in the section
 'Automatic Upgrade of skyTools on DVM Agent'



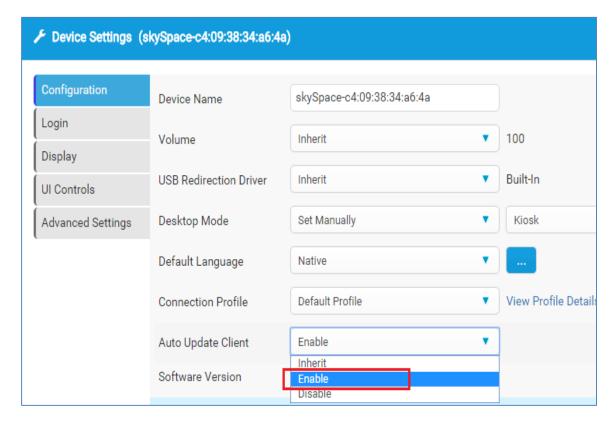
- e. Save the info.inf file
- f. Setup is ready for upgrade
- g. Refer the below sections to enable upgrade on registered skyPoints.

ENABLING AUTO UPDATE ON INTENDED DEVICES

- a. For enabling upgrade for selected devices use 'Device Settings'
- b. Select the skyPoint from skyControl Management Console Device tab
- c. Click on Device Settings button



d. In **Device Setting**s dialog – Select option Enable from 'Auto Update Client' dropdown list



e. Save the settings

DEVICE UPGRADE AND CHANGES FOR TS100/TS150/TS300 DEVICES

1. Once the Auto Update setting is enabled on intended, it will start downloading the hotfix copied on skyControl Server.

- 2. Devices will be rebooted, old software will be removed and new HyWorks Client compatible with HyWorks environment will be installed.
- 3. The devices will now be connecting to new HyWorks Controller only and will not be able to connect to old skyControl server.

4. Switching to HyWorks Controller:

- a. If devices are using Automatic Connection mechanism to connect to skyControl server, they will automatically connect to HyWorks Controller
- b. If skyControl Server IP was manually provided in Device Settings, then administrator will be required to change the HyWorks Controller IP/Hostname () and port number <38866>. Please note HyWorks Controller works on port 38866.
- 5. Devices are successfully moved to HyWorks environment.
- 6. Dummy Download: For protocol switching devices requires to keep one latest format upgrade patch locally and thus after connecting to HyWorks Controller for the first time, devices will automatically starts downloading the latest client upgrade files from Controller. The download is independent of Device Upgrade Settings and does not require any device reboot.

DEVICE UPGRADE AND CHAGES FOR TS200

The upgrade process for TS200 devices is little different and require administrator to take special care while doing migration.

Important Notes:

- Recommended Method for Migration: **Manual** uninstallation of old skySoft and installation of HyWorks client. Refer section: **Manual Configuration of TS200 Devices**
- For Automatic upgrade:
 - Strictly follow the section: Auto Upgrade of TS200

MANUAL CONFIGURATION OF TS200

This section will provide all necessary steps to migrate TS200 devices to HyWorks and register as Hy3020 in HyWorks Controller.

Prerequisite# 1: Disable Volume Protection:

It is important that volume protection on TS 200 is disabled before device can be migrated to HyWorks Environment. Follow the below steps to disable volume protection.

- 1. Login with Admin user
- 2. Navigate to Control Panel
- 3. Open the Terminal Manager from All Control Panel Items and when asked for password, provide appropriate password
- 4. In Terminal Manager window, navigate to 2nd tab (Shown with Volume name e.g. C: in screenshot below)
- 5. It will display information regarding current state of Volume Protection and buttons for altering the settings

- 6. Click on 'Disable' button to disable the Volume protection, confirm the operation by clicking on 'Yes' button on confirmation dialog
- 7. Confirm the operation by clicking on 'Yes' button on second confirmation dialog for Commit operation

Prerequisite# 2: Disable File Based Write Filter:

- 1. Login on TS200 with Admin user.
- 2. Open Admin Tab with password that is obtained from Accops Support Team
- 3. Go to File protection -> Uncheck File and folder protection -> Apply.
- 4. Reboot device.
- 5. Access TS200 with Admin user.
- 6. Control Panel -> Programs and features -> Right click on SkySoft -> Uninstall.
- 7. Reboot device.

Install new HyWorks Client

Now skySoft is removed from TS 200. The next step is to install new HyWorks Client on the device. Download new HyWorks Client on TS200 device and follow the below steps to install HyWorks Client manually on TS200 device.

- 1. Access TS200 with Admin user.
- 2. Run HyWorks client installer.
- 3. Click on Next button on Welcome screen
- 4. Accept license agreement > Click on Next button
- 5. Proceed with default options in installation wizard and click on install
- 6. Once installation is completed, confirmation for reboot will be displayed -> Click on Yes to reboot device
- 7. After reboot TS200 is opened with user account.
- 8. Run HyWorks client which will connect to HyWorks controller.
- 9. TS200 is recognized as HY3020 in HyWorks environment having HyWorks Controller with SP1 patch.

AUTO UPGRADE OF TS200 USING SKYCONTROL SERVER

File based protection is provided on TS200 devices which needs to be disabled on TS200 first, so that TS200 devices can be upgraded to HyWorks environment. Thus TS200 devices must be upgraded in two steps which are mentioned as below.

- 1. Unlock file system with upgrade **SKYUNLOCK**.
- 2. Upgrade to HyWorks using Upgrade SKYUPDATE

Pre-requisites:

- 1. Make sure all TS200 devices are inheriting Auto Update settings from Default settings.
 - a. Auto Update should be disabled initially in Default settings
- 2. All TS200 devices are up and running.
- 3. skyControl Helper v2.1.2.1 is successfully executed on skyControl server, which will set the update file as SKYUNLOCK.zip and version as 2116039 (greater than skySoft GA Release i.e. 2116038.)

4. Now that skyControl server is having SKYUNLOCK as upgrade patch enabled, the default version in info file should be greater than all the registered TS200 devices. E.g. is 4 registered TS200 are running software version as 2116038, 2116039, 2115437, 2119658; then the Info file must use version > 2119659.
Reason: All TS200 must be upgraded together with SKYUNLOCK and then with SKYUPDATE. Installing SKYUPDATE without SKYUNLOCK may leave devices in unusable state.

Upgrade Process:

- 5. Considering that SKYUNLOCK is successfully set as upgrade file and Info file is using version greater than all registered TS200 devices.
- 6. Enable Auto update from Default Settings
- 7. Once the Auto Update setting is enabled in Default Settings; all TS200 devices, it will start downloading the hotfix copied on skyControl Server.
- 8. Device will be rebooted and file system is now unlocked which means devices are now ready for upgrade or migration
- 9. Open info file and make following changes.
 - 1. Change filename to SKYUPDATE.zip
 - 2. Change version to 2116040 or greater than the current version being used by devices. As in above example it was 2119659 so the version should be 2119660
 - 3. Save Info.ini file.
- 10. As Auto update is already enabled, devices will start downloading the upgrade file **SKYUPDATE**, from skyControl Server
- 11. Devices will be rebooted, old software will be removed and new HyWorks client compatible with HyWorks environment will get installed.
- 12. Device desktop mode will be changed from kiosk to desktop and controller detection will be Automatic by default
- 13. As soon as the devices detects HyWorks Controller they will get registered a Hy3020.

HYWORKS DVM AGENT (HYWORKS TOOLS V2.5.1.0) INSTALLATION

Administrator can opt either of the following two processes to enable DVMs for HyWorks environment:

MANUAL INSTALLATION

Optional Step: Uninstall any previous version of skyTools if willing to work with HyWorks environment only.

- Download HyWorks Tools v2.5.4.1 from HyWorks Controller (Available in HyWorks Controller -> Management Console -> Help tab -> Downloads)
- 2. Access the DVM from respective Hypervisor console
- 3. Copy the HyWorksTools setup on the intended DVM
- 4. Double click on HyWorksTools setup file to invoke installation wizard
- 5. Follow the installation wizard with all default option and complete the installation.
- 6. HyWorksTools will get installed and DVM will be enabled for HyWorks Environment

7. Administrator can configure the DVM using DVM Pool in HyWorks Controller for the HyWorks Environment enabled devices/ users

AUTOMATIC UPGRADE USING SKYCONTROL

- 1. Administrator can also upgrade the DVMs using skyControl server also
- 2. Required Version: skyControl GA3 (2.1.70.16051) and skyTools GA3 (2.1.1.18) on DVMs
- 3. Considering that administrator has already executed skyControl Helper on skyControl Server to place the latest skyTools (v2.1.1.20) for automatic upgrade
 - i. If above step is not yet done, execute skyControl Helper on skyControl Server as instructed in this section 'Upgrading Devices'
- 4. skyControl will automatically install the latest skyTools (Can take up to 30 minutes) on configured DVMs (must have agent status as responding)
- 5. New skyTools 2.1.1.20 has integrated HyWorks Tools v2.5.4.1 and that will get installed on the DVMs Enabling them for HyWorks environment
- 6. Administrator can configure the DVM using DVM Pool in HyWorks Controller for the HyWorks Environment enabled devices/ users

HyWorks Environment is now configured and can be used to testing the latest features (Refer release notes document for detailed information of available features)

REFERENCES

- 1. HyWorks Controller Admin Guide
- 2. HyWorks Controller Installation Guide
- 3. HyWorks Quick Start Guide
- 4. HyDesk Upgrade Process Document
- 5. HyWorks DVM Agent Auto Upgrade

TROUBLESHOOTING

DEVICES CONTINOUSLY DOWNLOADING CLIENT FROM HYWORKS CONTROLLER

Scenario: After being upgraded from skySpace environments, devices gets registered with HyWorks Controller and thus downloads a dummy patch from HyWorks Controller, required for protocol switching at device end.

The patch download by device ignores the upgrade configuration on devices or current version on devices and controller.

Issue: If the devices just being upgraded from skySpace environment register with HyWorks Controller, and HyWorks Controller is not having the same version 7Zip file on appropriate directory. All new HyWorks Client will continuously initiate download from HyWorks Controller.

Resolution:

- 1. While migrating from skySpace environment, use only skyControl Helper setup to place skyPoint upgrade hotfixes to appropriate folders
- 2. Execute HyWorks Controller Helper compulsorily on HyWorks Controller server to keep appropriate HyWorks Client 7Zip files in their respective locations.