**Medtronic MITG**

**Research & Development**

**System Installation Qualification Plan/Procedure**

**Gateway Device Management Platform v4.0(Build v4.0.4)**

**RE00062907 Rev B**

|  |  |  |  |
| --- | --- | --- | --- |
| Issue Date: Refer to Agile | | | Page 1 of 25 |
|  | | | |
| Revision History: | | | |
| Revision | SDA | Description | |
| A | RC078142 | Initial Release | |
| B | RC0822274 | Update **QAServerInstallationAcceptanceTestProcedure**, Add **AgentCommonClientInstallTestProcedure** | |
|  |  | | |
| Author(s): Refer to Agile for approvals | | | |
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# Introduction

The purpose of this document is to specify the test protocol and document test results for the Installation Qualification performed on the Device Management Agent and Server installed on QA environment.

# References

1. System Requirements Specification (SRS); [R0030891](https://pulseconnect.covidien.com/servlet/JiveServlet/download/46973-2-84987/R0030891_A%20System%20Requirements%20Spec%20Gateway.docx); Rev S
2. Server Install and Configure Guide Gateway; R0043209; Rev L

# Scope

The scope of this IQ verifies proper installation of Agent software on the laptop. The IQ does not verify proper installation of the Client Application. For Server side, the IQ verifies the Server Install and Configure Guide [2] is correct.

# Responsibilities

System IQ test plan and procedure will be generated by testing engineer. Computer installation will be performed by testing engineer and server installation will be performed by development engineer.

# Test Configurations

Note: During IQ execution, all the information in tables in this section will be captured.

## Hardware Configuration

This section lists all hardware required to execute the Installation Qualification Testing. All servers are located in cloud servers which are hosted by Terremark.

### QA Servers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Web Server1** | **Web Server2** | **Application Server** | **Database Server** |
| Operation System | RedHat 6.8 | RedHat 6.8 | RedHat 6.8 | RedHat 6.8 |
| System type | Linux | Linux | Linux | Linux |
| Memory | 4 GB | 4 GB | 16 GB | 24 GB |
| CPU | 2 CPUs | 2 CPUs | 4 CPUs | 16 CPUs |
| Model | Intel(R) Xeon(R) CPU X5570 @ 2.93GHz | Intel(R) Xeon(R) CPU X5570 @ 2.93GHz | Intel(R) Xeon(R) CPU X5570 @ 2.93GHz | Intel(R) Xeon(R) CPU X5570 @ 2.93GHz |
| HDD | vm1774201 | vm1774301 | vm1774401 | ph1774501 |
| Physical Location | N/A | N/A | N/A | N/A |

### Computers

All the computers used in testing need to be reimaged to ensure no Agent or client installed.

(The IQ test will be performed on laptops. No testing will be performed on desktop but the test results with laptops are applicable to desktops since Gateway Agent and client application function depends on the Operating System and software environment.)

|  |  |  |  |
| --- | --- | --- | --- |
| **Term** | **Laptop 1** | **Laptop 2** | **Laptop 3** |
| Operation System | Windows 7 | Windows 10 | Windows 8 |
| System type | 64 bit | 64 bit | 64 bit |
| Network | Wireless network | Wireless network | Wireless network |
| Memory | 4 GB | 3 GB | 2 GB |
| CPU | 4 CPUs | 4 CPUs | 4 CPUs |
| Model | HP EliteBook 8460p | HP Elite Book 8460p | HP Elite Book 8460p |
| Serial | CNU3019WQK | CNU2281NV3 | CNU22929MZ |
| Asset | FA01264 | FA00123 | FA00157 |
| Physical Location | Hangzhou | Shanghai | Shanghai |

## Test Items/ Tools configuration

### Test Items

| **Test Items** | **Versions** |
| --- | --- |
| Web Server | 4.0.4 |
| Application Server | 4.0.4 |
| Agent | 4.0.4 |

### Test Tools

|  |  |
| --- | --- |
| **Test Tools/Client Application** | **Versions** |
| Common Client | 1.0 |

# Test Cases

## Server Operating System (OS) platform Versions

| **Test Procedure - QAServerOSPlatformVersionCheckTestProcedure** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Purpose:**  Verify that the correct versions of the OS platform are installed on Gateway Servers.  **Result** is ‘PASS’ if the Actual Version is the same with the Expected Version. Otherwise, ‘FAIL’. | | | | | | | |
| **OS Component** | **Expected Version** | **Actual Version** | | | | **PASS/FAIL** | **Initial/Date** |
| **Web Server1** | **Web Server2** | **Application Server** | **Database Server** |
| Red hat | Red hat v6.8 - 64bit platform |  |  |  |  | PASS/FAIL |  |

## Server Software Versions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Procedure - QAServerSoftwareVersionCheckTestProcedure** | | | | | |
| **Test Purpose:**  Verify that the correct versions of the different system software components are installed on Gateway Servers.  **Result** is ‘PASS’ if the Actual Version is the same with the Expected Version. Otherwise, ‘FAIL’. | | | | | |
| **Server Component** | **Software Component** | **Expected Version** | **Actual Version** | **PASS/FAIL** | **Initial/Date** |
| Web Server1 | JRE (Java Runtime Environment) | 1.8.0\_101 |  | PASS/FAIL |  |
| Web Server1 | Apache | 2.2.15 |  | PASS/FAIL |  |
| Web Server2 | JRE (Java Runtime Environment) | 1.8.0\_101 |  | PASS/FAIL |  |
| Web Server2 | Apache | 2.2.15 |  | PASS/FAIL |  |
| Application Server | JRE (Java Runtime Environment) | 1.8.0\_101 |  | PASS/FAIL |  |
| Application Server | Apache tomcat | 8.0.36 |  | PASS/FAIL |  |
| Database Server | MySQL | 5.7.15 |  | PASS/FAIL |  |

## Server Installation Test

Execute Server per section 18 in Install and Configure Guide Gateway [2].

|  |  |  |
| --- | --- | --- |
| **Test Procedure - QAServerInstallationAcceptanceTestProcedure** | | |
| **Test Purpose:**  Verify that the Server Install and Configure Guide of Gateway is correct for installation of Gateway Server. Detail Steps and checkpoints are listed in below table.  **Result** is ‘PASS’ if the all the steps performed are recorded the same with [2]. Otherwise, ‘FAIL’. | | |
| Completed By: | **Date Completed:** | **Test Execution Result:** |
|  |  |  |

Blow is the detail server deployment steps and result per section 18 of Install and Configure Guide Gateway [2]:

| **Steps #** | **CheckPoints** | | **Result**  **(PASS/FAIL)** |
| --- | --- | --- | --- |
| 1 | Create Jira ticket to record the change history | |  |
| 2 | Backup DB | Backup Mysql DB - gdmp4\_0 |  |
| 3 | Stop apache and tomcat services successfully | |  |
| 4 | Login to Jenkins to trigger the deploy process. Make sure no error happened during process. | |  |
| 5 | Check service status:  Check tomcat on APP server status is up: netstat -apn | grep 8080  Check OpenDJ on DB server is up:  netstat -apn | grep 4444  netstat –apn | grep 389  Check Mysql status:  netstat -apn | grep 3306  Check httpd is running:  netstat -apn | grep 80  Check ClamAV status:  netstat -apn | grep 3310 | |  |
| 6 | Check web code deployment version.  cat /var/www/html/configs/config.js | grep APP\_VERSION | |  |

## Agent Installation Acceptance Test

### Test Procedures Overview

Following test procedures will be executed on laptop side.

The QA environment installation test procedures needs to be executed on each latop which are listed in 5.1.2 in this document. Actual Results need to be logged by different Laptops which perform the Agent Installation Testing.

| Test Procedure Name | Description |
| --- | --- |
| InstallAgentLargerthan9GBTestProcedure | This procedure is to verify that QA Build Agent can be successfully installed on laptop within disk space larger than 9GB and its configuration file for server connection is encrypted to prevent from edition.  Also the default server URL for QA Agent is pointed to QA sever. |
| InstallAgentWithDiskSpace9GBTestProcedure | This procedure is to verify Agent can be installed when there is only 9GB space available on hard disk |
| InstallAgentOnDiskLower9GB | This test procedure is to verify agent can’t be installed on laptop which hard disk space lower than 9GB |
| InstallAgentInDifferentOSLanguages | This test procedure is to verify agent can be installed on different OS languages, testing will be mainly focus on English, Spanish, and Germany. |
| AgentUninstallTestProcedure | This test procedure is to verify agent can be uninstalled from control panel. |
| AgentReinstallTestProcedure | This test procedure is to verify agent can be installed again after it uninstalled, it also verifies agent can be uninstalled by ‘Uninstall Device Management Agent’ shortcut. |
| AgentSilentInstallTestProcedure | This test procedure is to verify agent can connect to server with silent installation when hard disk space larger than 9GB. |
| AgentSilentInstallLower9GBTestProcedure | This test procedure is to verify agent shall not be installed with silent installation mode when hard disk space lower than 9GB. |
| AgentCommonClientInstallTestProcedure | This test procedure is to verify agent and Common Client can be installed successfully, and Common Client can communicated with Agent to Server successfully. |

### Test Procedures Detail Steps

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Procedure –** **InstallAgentLargerthan9GBTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify Agent can be installed on different Operating Systems with disk space larger than 9GB. 2. To verify that Configuration file for Server URL is encrypted to prevent from edition.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation file is available on laptop. 3. Laptop disk space is larger than 9GB.   **Post-condition:**   1. Tester shall uninstall Agent after this test procedure executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Device Management Installation folder for agent , and right click agent installer – Run As Administrator. | | Device Management Agent - InstallShield Wizard launched successfully | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Click Next button on Welcome screen | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 3 | Select I accept the terms of the license agreement, and click Next button. | | Choose Destination Location screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 4 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Click Next button | | Starting Copying Files button shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Click Next Button | | Setup Status screen shows up with a progress bar.  Wait until the progress bar finishes, there is a Question popup: “Windows Service is installed and configured. Do you want to start it now?” | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
|  |  |  |
| 7 | Click Yes button | | InstallShield Wizard Complete screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 8 | Click Finish button. | | Verify Device Management Agent service is starting windows shows up and then disappeared | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 9 | Go to Windows Services window and check the Device Management Agent Service Status. | | Verify that Device Management Agent service 4.0 is in “Running” status. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 10 | Go to Agent installation folder: C:\Program Files\Covidien\ GDMPAgent\runtime\ | | Verify that the folder is successfully created after installation completes. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 11 | Check the Agent’s configuration file and try to open it under folder: C:\Program Files\Covidien\ GDMPAgent\runtime\resource\config | | Verify that the configuration file for Server URL is encrypted and user cannot modify it. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Procedure – InstallAgentWithDiskSpace9GBTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify that Agent can be installed on different Operating Systems with disk space equal to 9GB.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation file is available on laptop. 3. Laptop disk space is equal to 9GB.   **Post-condition:**   1. User shall uninstall Agent after this test procedure executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Device Management Installation folder for agent , and right click agent installer – Run As Administrator. | | Device Management Agent - InstallShield Wizard launched successfully | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Click Next button on Welcome screen | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 3 | Select I accept the terms of the license agreement, and click Next button. | | Choose Destination Location screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 4 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Click Next button | | Starting Copying Files button shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Click Next Button | | Setup Status screen shows up with a progress bar.  Wait until the progress bar finishes, there is a Question popup: “Windows Service is installed and configured. Do you want to start it now?” | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 7 | Click Yes button | | InstallShield Wizard Complete screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 8 | Click Finish button. | | Verify Device Management Agent service is starting windows shows up and then disappeared | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 9 | Go to Windows Service windows and check the Device Management Agent Service Status. | | Verify that Device Management Agent service is in “Running” status. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 10 | Go to Agent installation folder: C:\Program Files\Covidien\ GDMPAgent\runtime\ | | Verify that the folder is successfully created after installation completes with disk space equal to 9GB. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Procedure – InstallAgentOnDiskLower9GB** | | | | | | | |
| **Test Purpose:**   1. To verify Agent cannot be installed on different Operating Systems with disk space lower than 9GB.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation is available on laptop. 3. Laptop disk space is lower than 9GB. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Device Management Installation folder for agent , and right click agent installer – Run As Administrator. | | Device Management Agent - InstallShield Wizard launched successfully | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Click Next button on Welcome screen | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 3 | Select I accept the terms of the license agreement, and click Next button. | | Choose Destination Location screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 4 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Click Next button | | Starting Copying Files button shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Click Next Button | | Verify warning message should pop up that indicating user the disk space is less than 9GB. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 7 | Go to Agent installation folder: C:\Program Files\Covidien\GDMPAgent\ | | Verify the folder is not empty as the installation fails due to the low disk space. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Procedure – InstallAgentInDifferentOSLanguages** | | | | | | | |
| **Test Purpose:**   1. To verify Agent can be installed on different Operating Systems Languages (English, Spanish, and Germany) with disk space larger than 9GB.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation file has been ready. 3. Laptop disk space is larger than 9GB and has language pack for English, Spanish and Germany.   **Post-condition:**   1. Tester shall uninstal Agent after this test procedure executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Set the Laptop OS Language to English. | | Laptop Language is English. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Go to Device Management Installation folder for agent , and right click agent installer – Run As Administrator. | | Device Management Agent - InstallShield Wizard launched successfully | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 3 | Click Next button on Welcome screen | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 4 | Select I accept the terms of the license agreement, and click Next button. | | Choose Destination Location screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Click Next button | | Starting Copying Files button shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 7 | Click Next Button | | Setup Status screen shows up with a progress bar.  Wait until the progress bar finishes, there is a Question popup: “Windows Service is installed and configured. Do you want to start it now?” | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 8 | Click Yes button | | InstallShield Wizard Complete screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 9 | Click Finish button. | | Verify Device Management Agent service is starting windows shows up and then disappeared | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 10 | Go to Windows Service windows and check the Device Management Agent Service Status. | | Verify that Device Management Agent service is in “Running” status. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 11 | Go to Agent installation folder: C:\Program Files\Covidien\ GDMPAgent\runtime\ | | Verify that the folder is successfully created after installation completes. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 12 | Check the Agent’s configuration file and try to open it under Agent’s Resource Folder:  English path: C:\Program Files\Covidien\ GDMPAgent\runtime\resource\config  Spanish path: C:\Archivos de prgrama \Covidien\ GDMPAgent\runtime\resource\config  Gemerany path: C:\Programme\Covidien\ GDMPAgent\runtime\resource\config | | Verify that the configuration file for Server URL is encrypted and user cannot modify it. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 13 | Launch Vlex Client and login with LS10 user. | | Verify that log can be uploaded and there are available software returned. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 14 | Set the Laptop OS Language to Spanish and repeat above step 2-13 | | Agent can be successfully installed on Spanish OS. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 15 | Set the Laptop OS Language to Germany and repeat above steps 2-13. | | Agent can be successfully installed on Germany OS. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Procedure – AgentUninstallTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify that Installed Agent can be un-installed from control Panel on different Operating Systems.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent has been installed in the laptop. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Control Panel -> Program and Features screen. | | Device Management Agent item is in the “Uninstall or change a program” list. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Right click ‘Device Management Agent’, and click Uninstall | | 1. Verify ”Device Management Agent – InstallShield Wizard” window pops up. 2. Verify Next and Cancel button appears. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 3 | Click Cancel button. | | After confirm “Yes” in poped up window, the Device Management Agent item is still there. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 4 | Right click ‘Device Management Agent’, and click Uninstall button again. | | 1. Verify ”Device Management Agent – InstallShield Wizard” window pops up. 2. Verify Next and Cancel button appears. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 5 | Click Next Button | | 1. Verify “Confirm Uninstall” window pops up.  2. There are “OK” and “Cancel” button. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 6 | Click OK Button | | * + - 1. Verify there is Setup Status progress bar.       2. Verify there is “All removed” screen displaying when uninstall is completed.       3. Verify there is “Finish” button after click “OK” button. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 7 | Click Finish Button | | Verify there is “All removed” screen displayed. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 8 | Go to Agent installation folder: C:\Program Files\Covidien\ GDMPAgent\runtime | | Verify that this folder is empty. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 9 | Go to Windows Services page to check if Device Management Agent Service is removed | | Verify that Device Management Agent Service is removed. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 10 | Go to Windows Start Menu -> All Program list to check if Device Management Agent folder is removed. | | Verify that this Device Management Agent folder is also removed. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

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| **Test Procedure – AgentReinstallTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify Agent can be re-installed on different Operating Systems after uninstallation.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent has been uninstalled from the laptop.   **Post-condition:**   1. User shall uninstall Agent after this test procedure has been executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Device Management Installation folder for agent , and right click agent installer – Run As Administrator. | | Device Management Agent - InstallShield Wizard launched successfully | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Click Next button on Welcome screen | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 3 | Select I accept the terms of the license agreement, and click Next button. | | Choose Destination Location screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 4 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Click Next button | | Starting Copying Files button shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Click Next Button | | Setup Status screen shows up with a progress bar.  Wait until the progress bar finishes, there is a Question popup: “Windows Service is installed and configured. Do you want to start it now?” | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 7 | Click Yes button | | InstallShield Wizard Complete screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 8 | Click Finish button. | | Verify Device Management Agent service is starting windows shows up and then disappeared | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 9 | Go to Windows Service windows and check the Device Management Agent Service Status. | | Verify that Device Management Agent service is in “Running” status. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 10 | Go to Agent installation folder: C:\Program Files\Covidien\GDMPAgent\runtime\ | | Verify that the folder is successfully created after installation completes. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 11 | Go to Windows Start Menu -> All Program list to check if Device Management Agent folder is created. | | Verify that this Device Management Agent folder is displayed. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

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| **Test Procedure –** **AgentSilentInstallTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify Agent can be installed in silent mode on different Operating Systems with disk space larger than 9GB.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation file is available on laptop. 3. Laptop disk space is larger than 9GB.   **Post-condition:**   1. User shall uninstall Agent after this test procedure has been executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Open cmd.exe from Start Menu by search for ‘cmd’.  Go to Agent installation file folder in the cmd window by typing cd command, and type gdmp\_agent\_setup.exe /S | | Cmd.exe is running.  Agent is installing in silent mode and there is no error thrown in the cmd console window. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Wait for a while and go to Windows Service page and check the Device Management Agent Status. | | Verify that Device Management Agent service 4.0 is in “Running” status. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 3 | Go to Agent installation folder: C:\Program Files\Covidien\GDMPAgent\runtime | | Verify that the folder is successfully created after installation completes. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 4 | Go to Windows Start Menu -> All Program list to check if Device Management Agent folder is created. | | Verify that this Device Management Agent folder is displayed. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

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| **Test Procedure –** **AgentSilentInstallLower9GBTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify Agent can be installed in silent mode on different Operating Systems with disk space lower than 9GB.   **Pre-condition:**   1. Computer User has Admin Access. 2. Agent installation file is available on laptop. 3. Laptop disk space is lower than 9GB.   **Post-condition:**   1. Tester shall uninstall Agent after this test procedure has been executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Open cmd.exe from Start Menu by search for ‘cmd’.  Go to Agent installation file folder in the cmd window by typing cd command, and type RSA\_setup\_4.0.0.exe /S | | Cmd.exe is running.  Agent is installing in silent mode and there is no error thrown in the cmd console window. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Wait for a while and go to Windows Service page and check the Device Management Agent 4 Status. | | Verify there should be no Device Management Agent 4 service in the list. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 3 | Go to Agent installation folder: C:\Program Files\Covidien\ GDMPAgent | | Verify that there no this folder created. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 4 | Go to Windows Start Menu -> All Program list to check if Device Management Agent 4 folder is created. | | Verify that there no this folder created. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

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| **Test Procedure – AgentCommonClientInstallTestProcedure** | | | | | | | |
| **Test Purpose:**   1. To verify Common Client which bundled agent can be installed on different Operating Systems with disk space larger than 9GB. 2. Common Client can be communicated with Agent to Server.   **Pre-condition:**   1. Computer User has Admin Access. 2. Common Client installation file is available on laptop. 3. Laptop disk space is larger than 9GB. 4. CoT Admin User has been created in the server for Ablation Class of Trade. (Record User Name : mirror.wang@medtronic.com\_\_\_\_\_\_\_\_\_\_ ) 5. IIS has been installed and enabled in Windows features.   **Post-condition:**   1. User shall uninstall Common Client and Agent after this test procedure has been executed. | | | | | | | |
| **Step#** | **Test Steps** | | **Expected Result** | | **Actual Result (PASS/FAIL)** | | **Defect Id** |
| 1 | Go to Common Client installation file folder, and double click common\_client\_setup.exe installation file. | | “Common Client – InstallShield Wizard” Screen displays.  Microsoft SQL Server2008 R2 Express SP2(x64) is available for install | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 2 | Wait until SQL Server 2008 R2 SetUp is finished | | “Welcome to the InstallShield Wizard for Common Client” screen displays | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 3 | Click “Next” | | Windiws Components Screen displays | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| 4 | Click “Yes” | | License Agreement screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 5 | Select I accept the terms of the license agreement, and click Next button. | | Choose Running Mode screen shows up | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 6 | Select Standalone | | Setup Type screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 7 | Select Complete and Click Next button | | Choose Destination Location screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 8 | Click Next Button | | IP and Ports for VS and GDMPA screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 9 | Click Next button | | Language Options screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 10 | Click Next botton | | Start Copying Files screen shows up. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 11 | Click Next button | | Setup Status screen shows up with progress bar. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 12 | Click Finish button on InstallShield Wizrad Complete screen. | | Verify Device Management Agent service is started in Windows Servicew. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 13 | Go to folder, C:\Program Files\Covidien\CommonClient\, C:\Program Files\Covidien\ GDMPAgent\runtime\, C:\Program Files\Covidien\Informatics\ | | Verify that the folder is successfully created after installation completes. | | **Laptop 1** | PASS FAIL |  |
| **Laptop 2** | PASS FAIL |  |
| **Laptop 3** | PASS FAIL |  |
| 14 | Launch BiomedApp: http://localhost/biomedapp and login with CoT Admin user in Pre-condition 4. | | Verify that User can successfully login Common Client with Server connection status as connected. | | **Laptop 1** | PASS/FAIL |  |
| **Laptop 2** | PASS/FAIL |  |
| **Laptop 3** | PASS/FAIL |  |
| *The blocks below are for test execution purpose only (left blank in Test Procedure document)* | | | | | | | |
| **Tester Signature:** | | | | **Test Execution Date(mm/dd/yyyy):** | | | |
| **Laptop 1** | |  | |  | | | |
| **Laptop 2** | |  | |  | | | |
| **Laptop 3** | |  | |  | | | |

* 1. **Agent Installation Acceptance Test**

| **Test Procedure - AgentOSPlatformVersionsTestProcedure** | | | | |
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| **Test Purpose:**  Verify the Device Management Agent can install successfully on different Operating Systems.  **Result** is ‘PASS’ if the Actual Version is the same with the Expected Version. Otherwise, ‘FAIL’. | | | | |
| **QA Environment** | **QA Environment Expected Version** | **Actual Version** | **Pass/Fail** | **Initial/Date** |
| Windows 10 64bit+Agent | OS: 64bit platforms  Agent: 64bit Java Runtime Environment |  | PASS/FAIL |  |
| Windows 8 64bit+Agent | OS: 64bit platforms  Agent: 64bit Java Runtime Environment |  | PASS/FAIL |  |
| Windows 7 64bit+Agent | OS: 64bit platforms  Agent: 64bit Java Runtime Environment |  | PASS/FAIL |  |

# Test Results

The test results for Installation Qualification will be summarized in a separate test report document. That document details the execution sequence of test procedures, problems found, test configurations used, and other details. The scripted test results will be submitted to Agile. The test report is used as the basis for system deployment and testing team will make a recommendation on whether this system is ready for further testing including Defect Verification, Functional Test Procedures, End to End testing.