Installing Dell Docking Solution requirements with SCCM

Introduction:
The Dell Docking Solution has driver and firmware requirements for it to function properly. Some customers that use SCCM may choose to install these requirements without the use of Dell Command | Update. This document will provide instructions for including those requirements into your OS Deployment process or to install on existing systems with a task sequence.

*Note: In order for the docking station to be properly recognized, the following software must be installed before the user profile is created:

1. BIOS Update
2. Thunderbolt Controller Firmware
3. Thunderbolt Docking Station Drivers

Package Creation:

**BIOS:**

1. Launch Configuration Manager and go to Software Library
2. Expand Application Management, click on Packages, right-click in main window and select Create Package
3. Package Window
   a. Enter pertinent information for required fields
   b. Check ‘This package contains source files’
   c. Click Browse and select the file location
   d. Click Next
4. Select Standard Program and click Next
5. Standard Program
   a. Enter program name
   b. Click Browse, select BIOS executable and add /s to the command line arguments
   c. Select Whether or not a user is logged on
   d. Click Next
6. Click Next on Requirements
7. Click Continue on Summary
8. Click Finish on Completion Screen

Note: For adding more BIOS executables to the program select the BIOS package, right-click and select Create Program and repeat step 5 thru 8 for all BIOS executables

**Drivers:**

1. Launch Configuration Manager and go to Software Library
2. Expand Application Management, click on Packages, right-click in main window and select Create Package
3. Package Window
   a. Enter package name and any other pertinent information for required fields
b. Check ‘This package contains source files’
c. Click Browse and select the file location
d. Click Next
4. Select Standard Program and click Next
5. Standard Program
   a. Enter program name
   b. Click Browse, select Realtek USB Network Driver executable and add /s to the command line arguments
   c. Select Whether or not a user is logged on
d. Click Next
6. Click Next on Requirements
7. Click Continue on Summary
8. Click Finish on Completion Screen
9. Select the package you just created, right-click and select Create Program and repeat steps 5-8 for the Realtek USB Audio Driver
10. Select the same package, right-click and select Create Program and repeat steps 5-8 for the ASMedia Driver
11. Select the same package, right-click and select Create Program and repeat steps 5-8 for the Intel Thunderbolt™ Driver
12. Select the same package, right-click and select Create Program and repeat steps 5-8 for the Intel Thunderbolt™ Firmware.

Note: For OSD with driver cabs that include the Dell Docking Solution drivers the only program in the package will be the Intel Thunderbolt™ Firmware.

**OSD Task Sequence – Driver cab without Dell Docking Solution drivers:**
1. Launch Configuration Manager and go to Software Library
2. Expand Operating Systems, click on Task Sequences, right-click in the main window and select Create Dell Task Sequence
3. Client Operating System Deployment Task Template
   a. Enter Task sequence name
   b. Check Configure BIOS
   c. Enter Network Admin Account information
   d. Select OS installation type, select Operating System and Package with Sysprep.inf (if required)
   e. Click Create
4. Select the task sequence, right-click and select Edit
5. Task Sequence Editor
   a. Click Add, select Software > Install Package
   b. Move Install Package to Step 1 under Configure Hardware
   c. Select the BIOS package
   d. Select the BIOS program
   e. Click on Options, click on Add Condition and select WMI Query
   f. WMI Query Properties
i. WMI Namespace: root\cimv2

ii. WQL Query:

```
SELECT * FROM Win32_ComputerSystem WHERE Model Like "modelname"
```

NOTE: “modelname” in the WMI query above, needs to be replaced with the correct model identifier (like “Latitude 7370”) for the system that needs the applicable BIOS install. To find that model identifier, you can use either a
- WMIC command - “csproduct get name”
- Powershell – “get-wmiobject win32_computersystem | select model”
- View the list of model names in the “System Driver Library Import Wizard”

iii. Click OK

g. Repeat steps a-f for all BIOS executables in the package

h. Click Add, select Software Install Package

i. Move Install Package after Setup Windows and ConfigMgr

j. Select ‘Install software packages according to dynamic variable list’

k. Enter Base variable name *001 where * is unique variable for your environment

l. Click on Options, click on Add Condition and select Task Sequence Variable

m. Task Sequence Variable

i. Enter variable *001

ii. Enter value PackageID:Program(Realtek USB Network Interface Controller)

iii. Click OK

iv. Repeat steps i through iii for with variable *002 and Realtek USB Audio Controller

v. Repeat steps i through iii for with variable *003 and ASMedia USB Controller Driver

vi. Repeat steps i through iii for with variable *004 and Intel Thunderbolt™ Controller Driver

vii. Repeat steps i through iii for with variable *005 and Intel Thunderbolt™ Controller Firmware

6. Click OK to save this step, then OK to save the Task Sequence. Then perform normal process to distribute and deploy the task sequence

Note: BIOS step is optional if updates do not require the BIOS to be at a certain level

**OSD Task Sequence – Driver cab with Dell Docking Solution drivers:**

1. Launch Configuration Manager and go to Software Library

2. Expand Operating Systems, click on Task Sequences, right-click in the main window and select Create Dell Task Sequence

3. Client Operating System Deployment Task Template

   a. Enter Task sequence name

   b. Check Configure BIOS

   c. Enter Network Admin Account information
d. Select OS installation type, select Operating System and Package with Sysprep.inf (if required)
e. Click Create

4. Select the task sequence, right-click and select Edit
5. Task Sequence Editor
   a. Click Add, select Software > Install Package
   b. Move Install Package to Step 1 under Configure Hardware
   c. Select the BIOS package
   d. Select the BIOS program
   e. Click on Options, click on Add Condition and select WMI Query
   f. WMI Query Properties
      i. WMI Namespace: root\cimv2
      ii. WQL Query:

```
SELECT * FROM Win32_ComputerSystem WHERE Model Like "modelname"
```

NOTE: “modelname” in the WMI query above, needs to be replaced with the correct model identifier (like “Latitude 7370”) for the system that needs the applicable BIOS install. To find that model identifier, you can use either a
   • WMIC command - “csproduct get name”
   • Powershell – “get-wmiobject win32_computersystem | select model”
   • View the list of model names in the “System Driver Library Import Wizard”
   iii. Click OK
   g. Repeat steps a-f for all BIOS executables in the package
   h. Click Add, select Software Install Package
      i. Move Install Package after Setup Windows and ConfigMgr
   j. Select ‘Install a single software package’
      i. Click Browse
      ii. Select Firmware package and click OK
      iii. Select Firmware program
   k. Click OK

6. Right-click on the task sequence, click Distribute Content and click OK
7. Right-click on the task sequence, click Deploy and follow deployment steps based on your requirements

Note: BIOS step is optional if updates do not require the BIOS to be at a certain level

Pre-Existing OS Task Sequence – With BIOS Update:

1. Launch Configuration Manager and go to Software Library
2. Expand Operating Systems, click on Task Sequences, right-click in the main window and select Create Task Sequence
3. Create a new custom task sequence
   a. Enter Task sequence name, description and click Next
   b. Click Next on Summary Screen
   c. Click Finish on Completion
4. Select the task sequence, right-click and select Edit
5. Task Sequence Editor
   a. Click Add, select Software > Install Package
   b. Select the BIOS package
   c. Select the BIOS program
   d. Click on Options, click on Add Condition and select WMI Query
   e. WMI Query Properties
      i. WMI Namespace: root\cimv2
      ii. WQL Query:

      SELECT * FROM Win32_ComputerSystem WHERE Model Like "modelname"

      NOTE: “modelname” in the WMI query above, needs to be replaced with the correct model identifier (like “Latitude 7370”) for the system that needs the applicable BIOS install. To find that model identifier, you can use either a
      • WMIC command - “csproduct get name”
      • Powershell – “get-wmiobject win32_computersystem | select model”
      • View the list of model names in the “System Driver Library Import Wizard”
      iii. Click OK
   f. Repeat steps a-f for all BIOS executables in the package
   g. Click Add, select Software Install Package
   h. Select ‘Install software packages according to dynamic variable list’
   i. Enter Base variable name *001 where * is unique variable for your environment
   j. Click on Options, click on Add Condition and select Task Sequence Variable
   k. Task Sequence Variable
      i. Enter variable *001
      ii. Enter value PackageID:Program(Realtek USB Network Interface Controller)
      iii. Click OK
      iv. Repeat steps i through iii for with variable *002 and Realtek USB Audio Controller
      v. Repeat steps i through iii for with variable *003 and ASMedia USB Controller Driver
      vi. Repeat steps i through iii for with variable *004 and Intel Thunderbolt™ Controller Driver
      vii. Repeat steps i through iii for with variable *005 and Intel Thunderbolt™ Controller Firmware
      l. Click OK
6. Right-click on the task sequence, click Distribute Content and click OK
7. Right-click on the task sequence, click Deploy and follow deployment steps based on your requirements

**Pre-Existing OS Task Sequence – Without BIOS Update:**

1. Launch Configuration Manager and go to Software Library
2. Expand Operating Systems, click on Task Sequences, right-click in the main window and select Create Task Sequence
3. Create a new custom task sequence
   a. Enter Task sequence name, description and click Next
   b. Click Next on Summary Screen
   c. Click Finish on Completion
4. Select the task sequence, right-click and select Edit
5. Task Sequence Editor
   a. Click Add, select Software > Install Package
   b. Select ‘Install software packages according to dynamic variable list’
   c. Enter Base variable name *001 where * is unique variable for your environment
   d. Click on Options, click on Add Condition and select Task Sequence Variable
   e. Task Sequence Variable
      i. Enter variable *001
      ii. Enter value PackageID:Program(Realtek USB Network Interface Controller)
      iii. Click OK
      iv. Repeat steps i through iii for with variable *002 and Realtek USB Audio Controller
      v. Repeat steps i through iii for with variable *003 and ASMedia USB Controller Driver
      vi. Repeat steps i through iii for with variable *004 and Intel Thunderbolt™ Controller Driver
      vii. Repeat steps i through iii for with variable *005 and Intel Thunderbolt™ Controller Firmware
   f. Click OK
6. Right-click on the task sequence, click Distribute Content and click OK
7. Right-click on the task sequence, click Deploy and follow deployment steps based on your requirements