

# Image Backup and Recovery Procedures

Thank you for purchasing a Fujitsu computer. Fujitsu is committed to bringing you the best computing experience with your new system.

It is very important that you create DVD copies of your Recovery Image and Bootable Disc before beginning to use your system. To do so, follow the instructions in the “Creating a Backup of Bootable Disc and Recovery Image” section of this document.

It is also important that you create a copy of the software that is essential for your system to access the internet (hereafter called “essential access software”) to external writable media or an external drive. To do so, follow the instructions in the [“Creating a Backup of the Essential Access Software”](#) section.

## MAKING BACKUPS OF THE RECOVERY IMAGE AND SOFTWARE

### Creating a Backup of Bootable Disc and Recovery Image

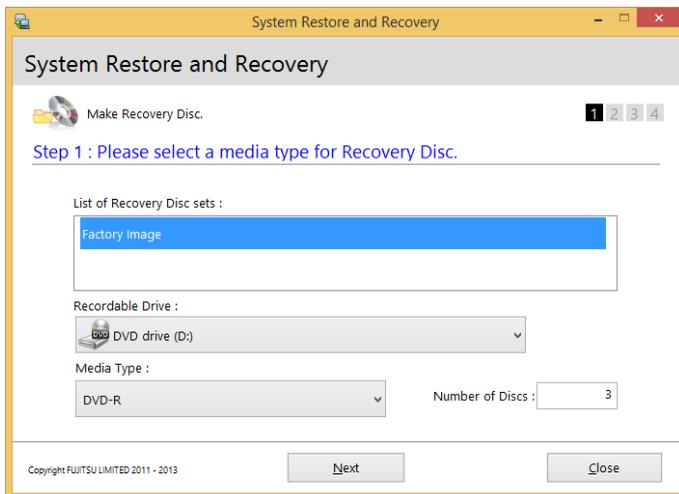
When you purchased your new system, a copy of the recovery image was loaded into a hidden partition on your hard disk drive. Having a copy of the recovery image available to you means that in the event of system failure, you will be able to restore it and re-install the essential access software using Fujitsu Software Auto Installer.

To make a copy of the recovery image to DVD discs, you will need three or four blank discs to create the copy. Please take note that you are allowed to create the recovery image DVD for one time ONLY. After creating the copy, be sure to label the discs and keep them in a safe place to ensure that they do not get damaged.

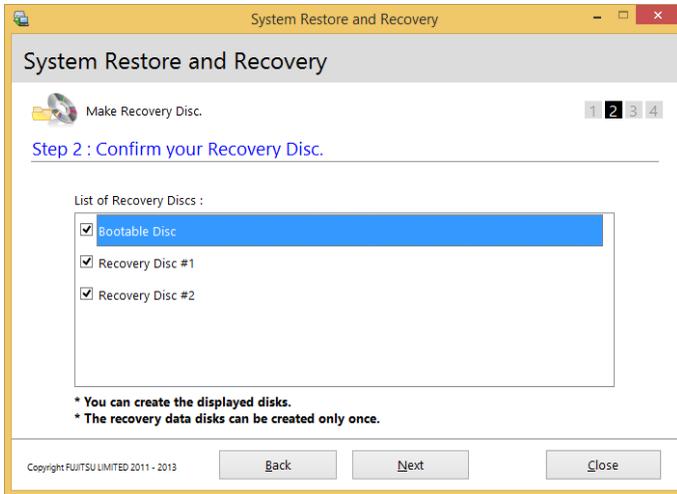


Note: If your system does not have an internal writable DVD drive, connect your system to an external drive\* before beginning the following steps.

1. Launch *System Restore and Recovery* from the desktop icon. It will allow you to create the Bootable Disc and the Recovery Image Disc Set.
2. In "Step 1: Please select a media type for Recovery Disc.":
  - a. Select *Factory Image* recovery disc sets.
  - b. Select recordable drive and media type.
  - c. Take note of the number of discs that are needed for the set.
  - d. Click *Next* to proceed.



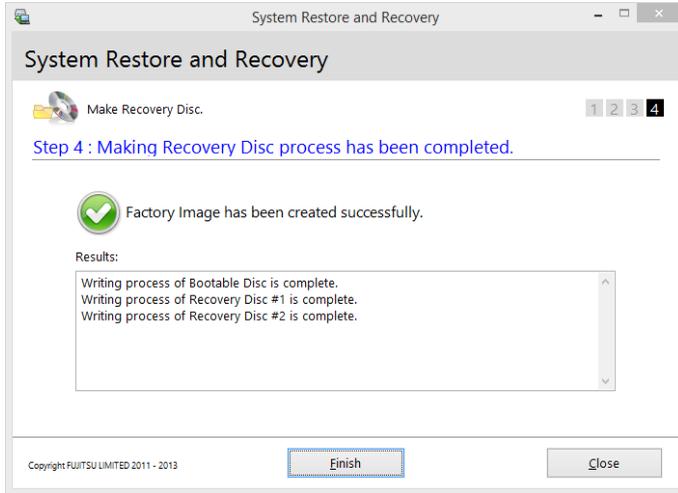
3. In “Step 2: Confirm your Recovery Disc.”, click *Next*.



4. In “Step 3: Making Recovery Disc.”, follow the on-screen instructions to make the disc or disc set, then click *Start*. It takes approximately 20 minutes to make one disc.



5. In “Step 4: Making Recovery Disc process has been completed.”, when the disc creation is completed, a message appears. Click *Finish* to exit the program.

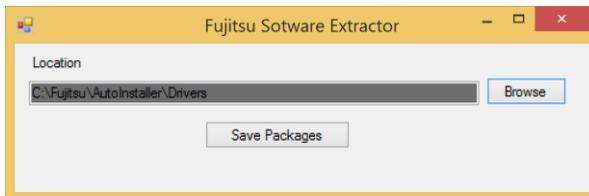


\* DEPENDING UPON YOUR OPTICAL DRIVE AND MEDIA FORMAT USED, SOME MEDIA TYPES MAY BE INCOMPATIBLE FOR CREATING IMAGE BACKUPS.

## Creating a Backup of the Essential Access Software

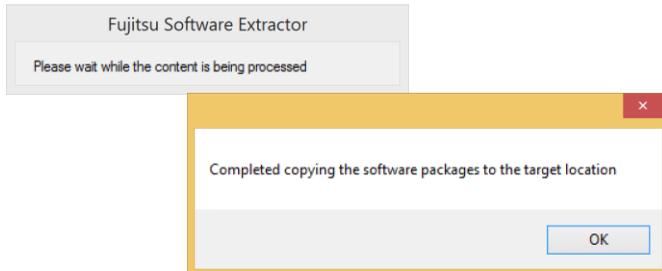
When you purchased your new system, a “Fujitsu Software Extractor” shortcut was loaded to “C:\Fujitsu\Drivers\AutoInstaller\”. This shortcut allows you to save the software driver packages along with the extracted Auto Installer software package to a selected location. It is recommended that you save these packages to writable media or an external drive. This ensures that in the event of system failure you will be able to re-install the essential access software.

1. Open the C:\Fujitsu\Drivers\AutoInstaller\ folder
2. Run “Fujitsu Software Extractor” as an Administrator
  - a. Right-click on Fujitsu Software Extractor.
  - b. Select the “Run as Administrator” option from the menu that is displayed.
3. The default save location is C:\Fujitsu\AutoInstaller\Drivers\. You can change the location by clicking on the *Browse* button and selecting your preferred location.



**Note:** It is recommended that you change the default location and save the software packages to the external writable media or drive.

4. Click on the *Save Packages* button.
5. Fujitsu Software Extractor copies the zipped software packages and Readme files, and extracts the Auto Installer folder to the selected location.



Note: The extracted Auto Installer will later be used to install the software automatically on the system, in the event the system is recovered with the generic image where the software is not pre-installed in the image.

## SYSTEM RECOVERY WHEN THE HARD DRIVE IS STILL ACCESSIBLE

### Using the Recovery and Utility Tools

The Recovery and Utility tools consist of a variety of tools that will help you recover your system, diagnose your hardware and delete the data from your hard disk.

### Methods for Accessing the Utilities

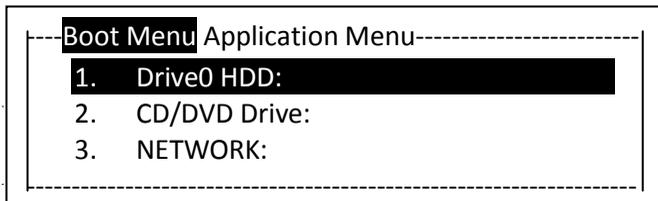
Recovery and Utility Tools are preinstalled in a hidden partition by the factory, or they can be accessed by using the bootable disc.



Note: The Recovery and Utility tools may be deleted from your hard disk drive if you modify the partitions. If that occurs, you will not be able to use the hidden partition for booting to Recovery and Utility Tools, but you will still be able to boot from the Bootable Disc.

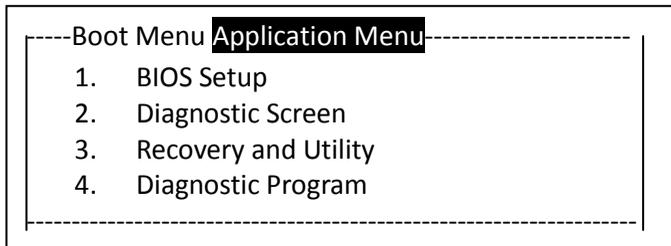
### Determining Whether Recovery and Utility is Pre-loaded

1. Turn on or reboot your system. When the Fujitsu logo appears, press the F12 key.



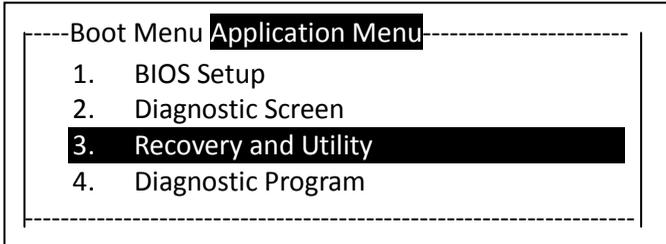
(\*Actual screen display varies between models.)

2. Use the Tab key to get to the Application Menu.



(\*Actual screen display varies between models.)

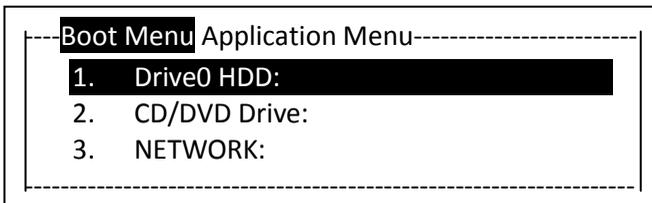
3. Check whether the Recovery and Utility option is present. If it is not present, it means that the utility must be used from the Bootable Disc. Proceed to the “[Running Recovery and Utility from the Bootable Disc](#)” section if Recovery and Utility is unavailable.



(\*Actual screen display varies between models.)

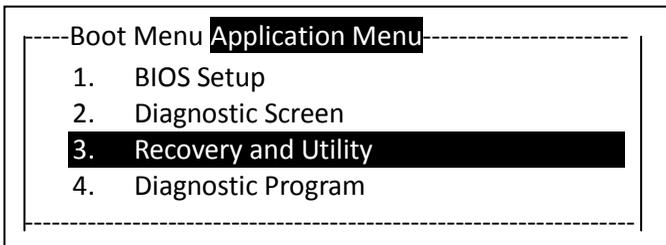
## Running Recovery and Utility from Hard Disk

1. Turn on or reboot your system. When the Fujitsu logo appears, press the F12 key.



(\*Actual screen display varies between models.)

2. Use the Tab key to get to the Application Menu.
3. Cursor down to *Recovery and Utility* and press the Enter key.



(\*Actual screen display varies between models.)

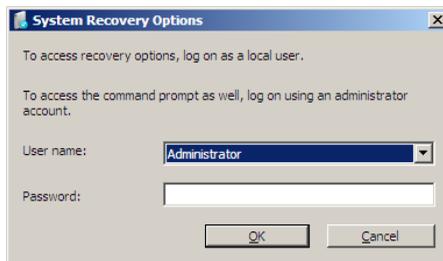
- The recovery environment initializes, then the System Recovery Options appears. Select a keyboard input method and click *Next*.



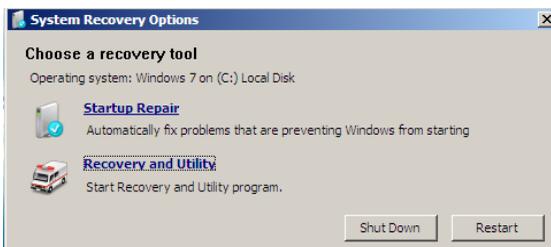
- Select an operating system to recover, then click *Next*.



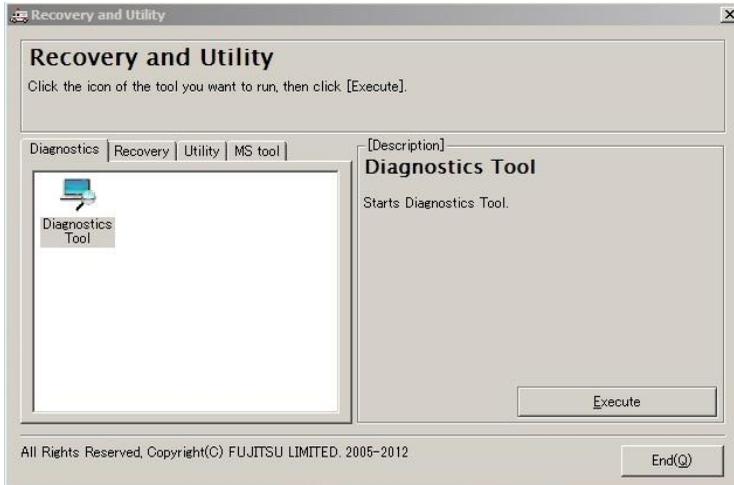
- Select user name and enter the password, click *OK*.



- Click *Recovery and Utility*.



8. The *Recovery and Utility* options will be shown.



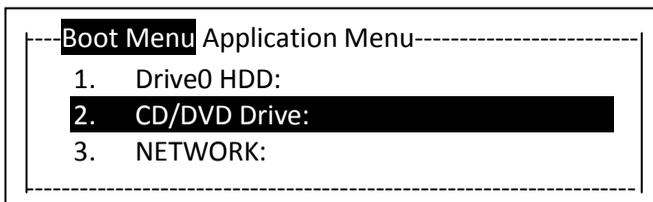
9. If this was successful please skip the next step and go to the section “**Recovery Tool**”.

10. If this was NOT successful, please go to the next step.

## Running Recovery and Utility from the Bootable Disc

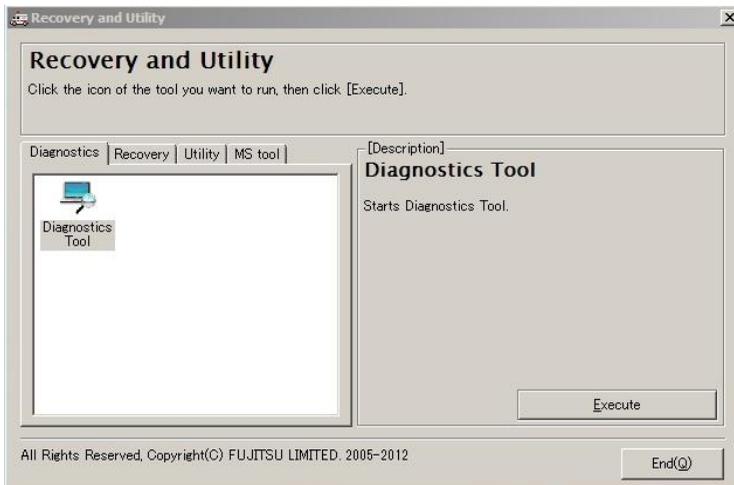
To verify/change the boot-up priority (rather than booting-up from the hard drive or an external media drive), perform the following steps:

1. Power on your system. When the Fujitsu logo appears on the screen, press the F12 key.
2. Insert the bootable disc into the drive tray.
3. Highlight the CD/DVD option from the Boot menu, then press Enter.



(\*Actual screen display varies between models.)

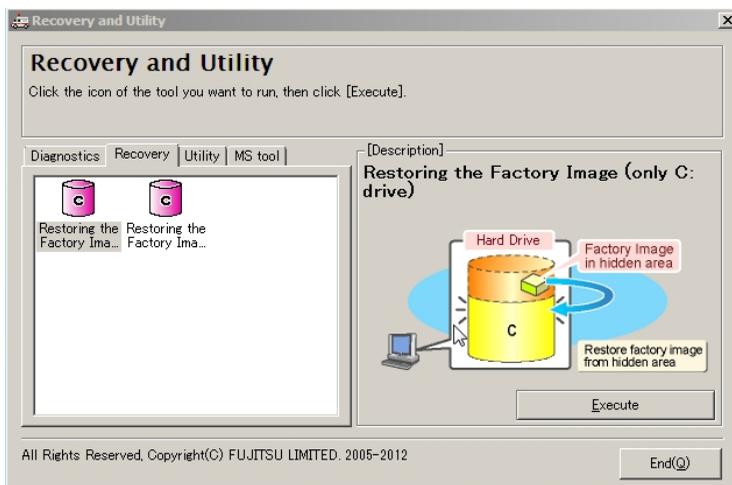
4. The recovery environment initializes, then the *Recovery and Utility* options appears.



### Recovery Tool

Select the *Recovery* tab to display the Recovery tool. It contains two options:

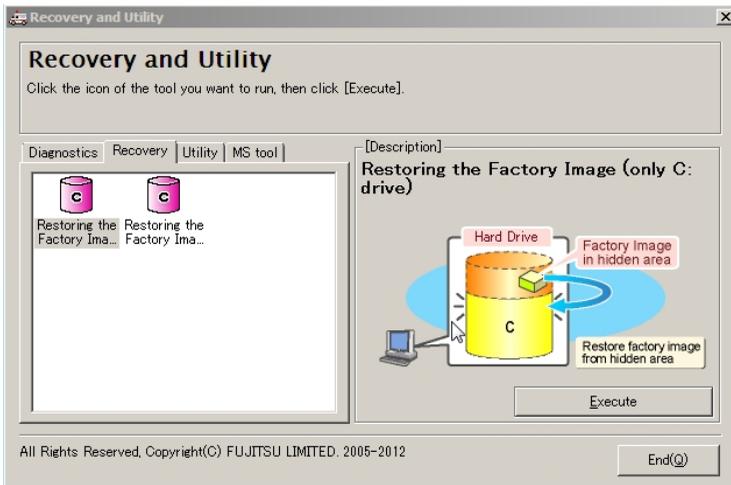
- Restoring the Factory Image (only C: drive)
- Restoring the Factory Image (full hard drive recovery).



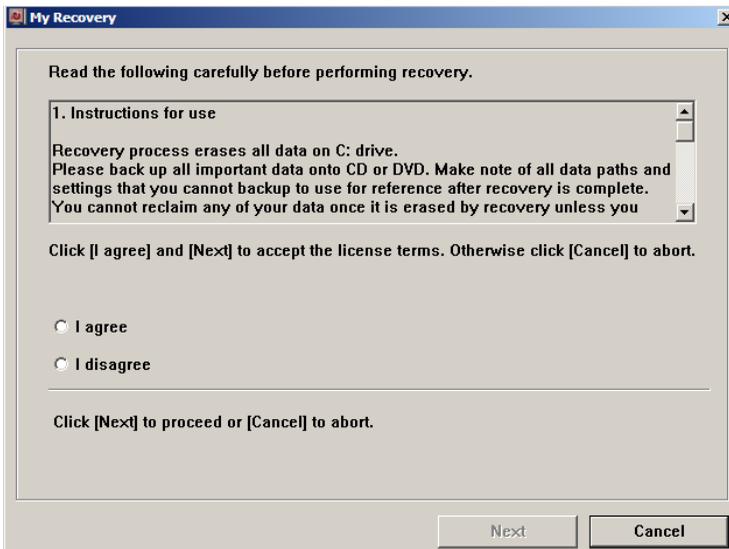
You can use these tools to restore the Recovery Image from the hidden partition, or perform a full hard drive recovery. Please refer to instructions in the [“Creating a Backup of Bootable Disc and Recovery Image”](#) section for details on how to create a Recovery Image disc set.

## Restore the Recovery Image from Hidden Partition

1. Select *Restoring the Factory Image (only C: drive)* from Recovery tool, and click *Execute*.



2. Read the instructions for use carefully, then click *I agree* and *Next* to proceed if you accept the license terms; or *I disagree* to leave the recovery environment.



3. All data on the C: drive will be deleted. Click *OK* to start the recovery process.



4. The progress bar appears. Wait for the process to complete.
5. When the recovery process completes, the message "Restoration has been completed. Click [OK] to reboot the computer" will be shown. Click *OK* to restart to Windows.
6. Follow the steps in the "[Auto-Installation Support for Essential Access Software from Hidden Partition](#)" section to enable network access.
7. Follow the steps in the "[Auto Download of Applicable Software from Support Website](#)" section, download FSDM (Fujitsu Software Download Manager) and then use it to download all the software applicable to the model and OS.
8. Follow the steps in the "[Auto Installation Support for the Software Downloaded from Support Website](#)" section to install all the software.

## SYSTEM RECOVERY WHEN THE HARD DRIVE IS NOT BOOTABLE

### Restore the Recovery Image for Full Hard Drive

Follow the steps in the “[Recovering Your Recovery Image Using Recovery and Utility \(for new hard drive or non-bootable hard drive\)](#)” section. You will need the Bootable Disc and the Recovery Disc Set for this task.



**WARNING:** It is highly recommended that you send your product to Fujitsu Service to replace a hard drive. A mistake could possibly destroy your computer, your new hard drive or both.

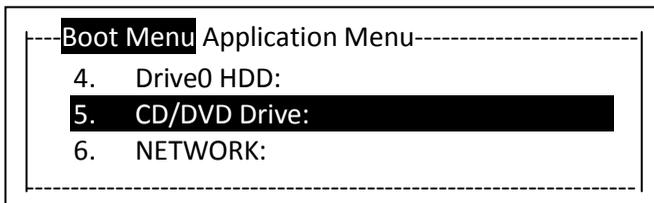
### Recovering Your Recovery Image Using Recovery and Utility (for new hard drive or non-bootable hard drive)

If you have installed a new hard drive or your hard drive is not bootable, perform the following steps.



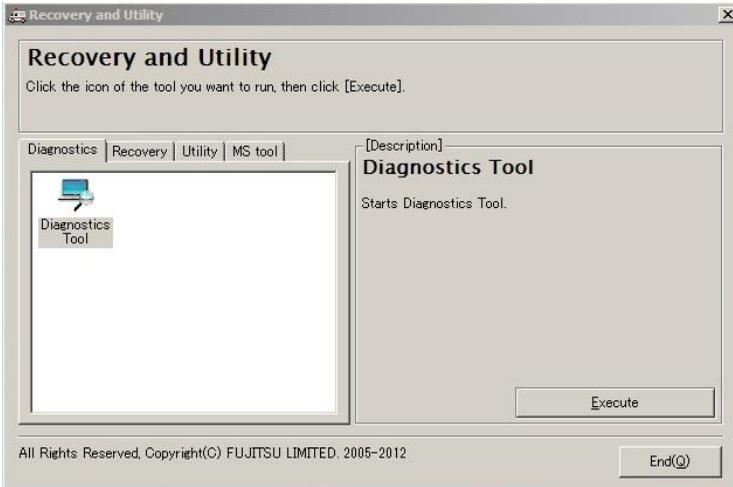
Note: You will need the Bootable disc and Recovery Image disc set for this recovery.

1. Power on your system. When the Fujitsu logo appears on the screen, press the F12 key.
2. Insert the bootable disc in your DVD drive.
3. Highlight the CD/DVD option from the Boot Menu and press Enter.

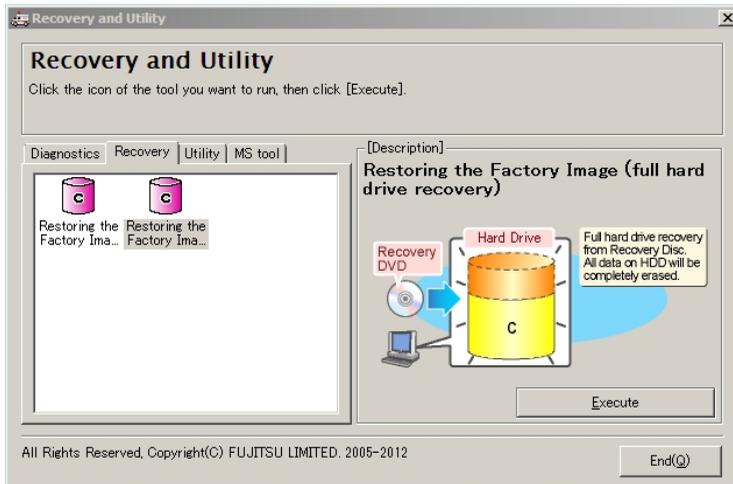


(\*Actual screen display varies between models.)

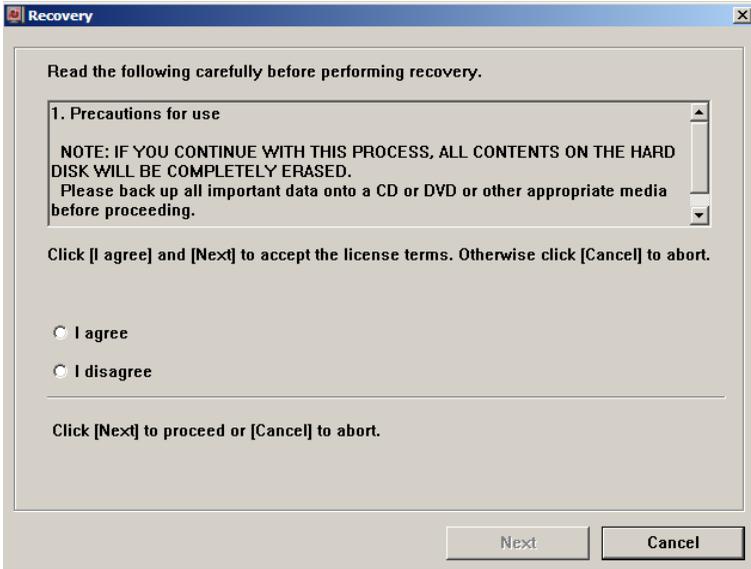
4. The recovery environment initializes, then the Recovery and Utility options appears.



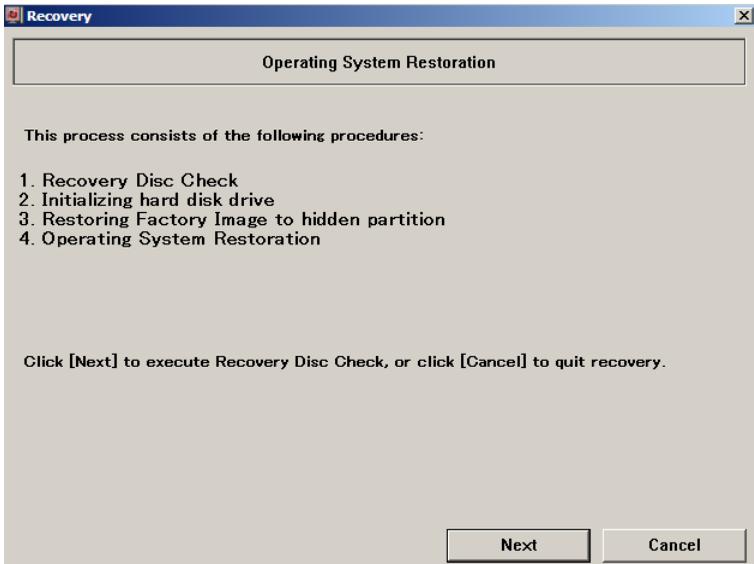
5. Select the *Recovery* tab. Then select *Restoring the Factory Image (full hard drive recovery)* from Recovery tool, and click *Execute*.



6. Read the precautions for use carefully, then click *I agree* and *Next* to proceed if you accept the license terms; or *I disagree* to leave the recovery environment.



7. The process will first perform a Recovery Disc Check. Click *Next* to verify the recovery discs set.



8. Insert Recovery Disc #1 into the optical drive. Click *Next* when ready.
9. Follow the onscreen instructions to insert the remaining recovery discs one-by-one into the optical drive. Click *OK* when ready.
10. After the disc check has completed, remove the recovery disc from the optical drive and click *Next* to continue.
11. Re-insert the Bootable Disc into the optical drive and click *Next* to proceed.
12. The final warning message appears, informing you that ALL data on the hard drive will be completely erased. If you are ready to proceed with recovery, click *OK* to start the recovery process; otherwise, click *Cancel*.
13. The process will now restore the Recovery Image to the hard drive. Follow the prompts to insert the next recovery discs and click *Next* to continue.
14. When the recovery process completes, the message "Restoration has been completed. Click [OK] to reboot the computer" will be shown. Click *OK* to restart automatically and then go through the first boot process.
15. Follow the steps in the "[Auto-Installation Support for Essential Access Software from Backup Location](#)" section to enable network access.
16. Follow the steps in the "[Auto Download of Applicable Software from Support Website](#)" section, download FSDM (Fujitsu Software Download Manager) and then use it to download all the software applicable to the model and OS.
17. Follow the steps in the "[Auto Installation Support for the Software Downloaded from Support Website](#)" section to install all the software.

## INSTALLING SOFTWARE AFTER THE RECOVERY IMAGE IS RESTORED

### Auto-Installation Support for Essential Access Software from Hidden Partition

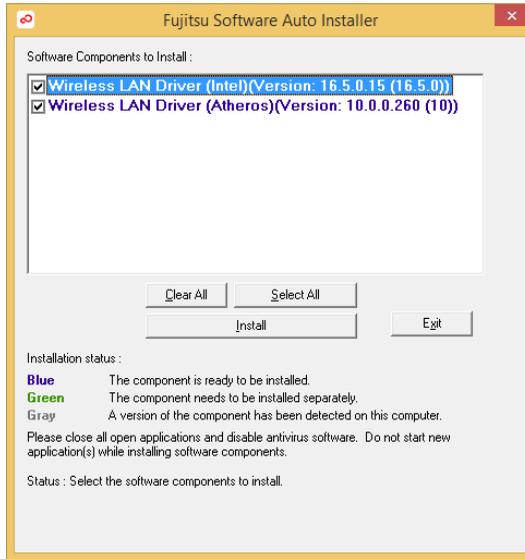
The below listed steps are applicable only in cases in which the recovery image restore and hidden partition contents have **NOT** been wiped out, i.e. you have not performed any full hard drive recovery or data delete.

1. After the recovery image is restored, launch Fujitsu Software Auto Installer by double-clicking on the Fujitsu Software Auto Installer desktop icon.
2. Click *Yes* on the User Account Control Dialog box. This will take some time to process the software packages. A message will be displayed during this time, "Please wait while the content is being processed".
3. If EULA is displayed for Fujitsu Software Auto Installer, select *I agree* and click *Continue*.

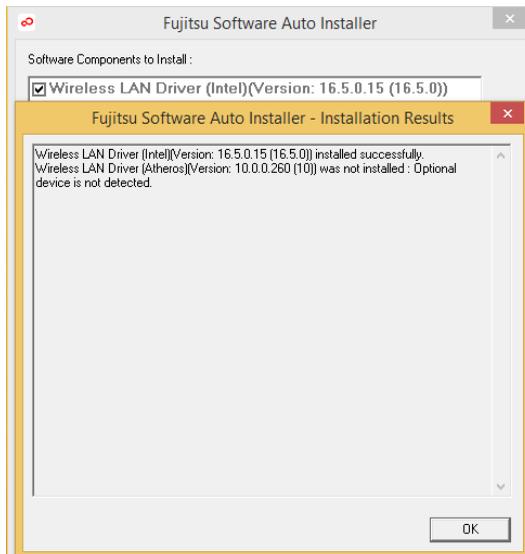


4. Then the Fujitsu Software Auto Installer user interface will be launched providing the ability to auto-install the essential access software on the system.

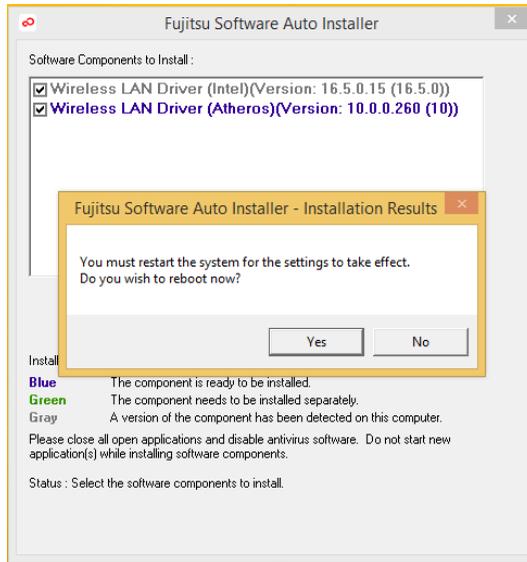
5. It is recommended that you install all the software in the listed order by clicking *Select All*.



6. Click *Install* to start the installation.
7. After installing all the selected drivers, the Installation Results window will be displayed. Click *OK*.



8. "You must restart the system for the settings to take effect. Do you wish to reboot now?" message appears. Select *Yes*.

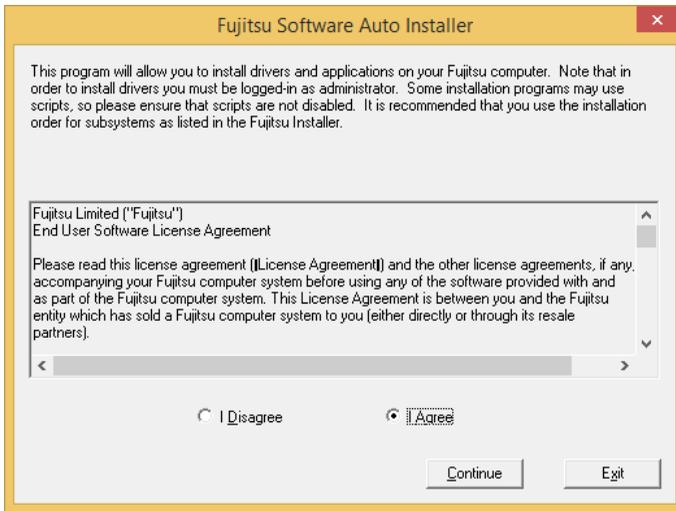


9. The system will now reboot.
10. You can now connect to the internet and download FSDM (Fujitsu Software Download Manager) from the [Support Site](#), then use FSDM to download all the software applicable to the model and OS if they are not downloaded yet.

## Auto-Installation Support for Essential Access Software from Backup Location

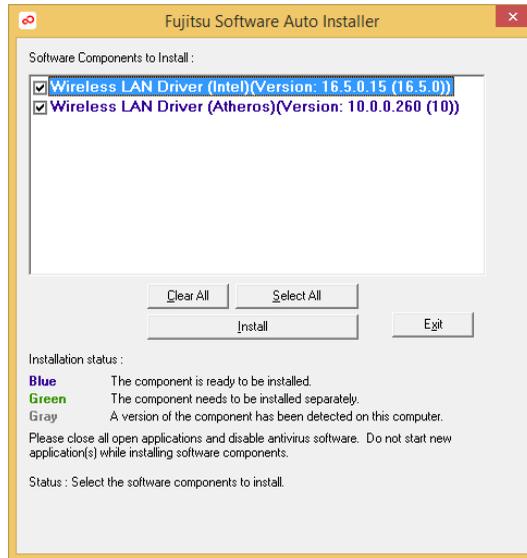
The below listed steps are applicable in cases in which a backup copy was created as mentioned in the section “[Creating a Backup of the Essential Access Software](#)”.

1. It is important to have the extracted Auto Installer software package folder and Readme file in the same location as other software folders. Otherwise auto-installation of the software will not be supported.
2. Inside the Auto Installer software package, launch FjAutoinstall.exe as an Administrator.
3. Click *Yes* on the User Account Control dialog box. This will take some time to process the software packages. A message will be displayed during this time stating, “Please wait while the content is being processed”.
4. If EULA is displayed for Fujitsu Software Auto Installer, select *I agree* and click *Continue*.

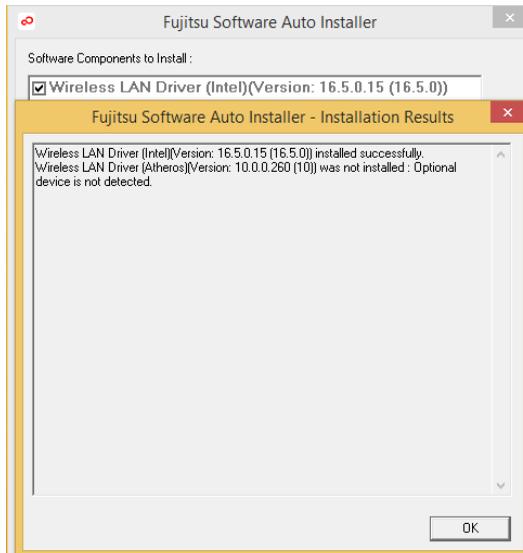


5. The Fujitsu Software Auto Installer user interface will be launched providing ability to auto install the essential access software on the system.

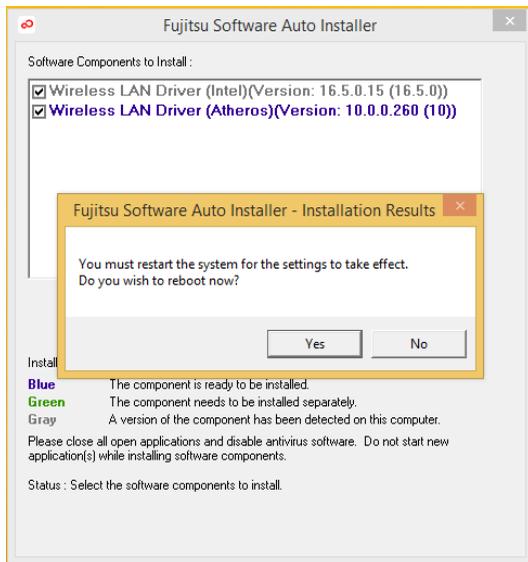
- It is recommended that you install all the software in the listed order by clicking *Select All*.



- Click the *Install* button to start the installation.
- After installing all the selected drivers, the Installation Results window will be displayed. Click *OK*.



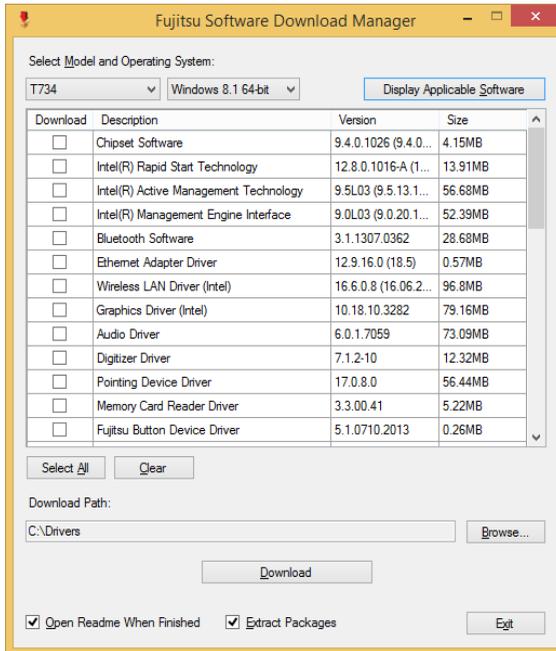
9. “You must restart the system for the settings to take effect. Do you wish to reboot now?” message appears. Select *Yes*.



10. The system will now reboot.

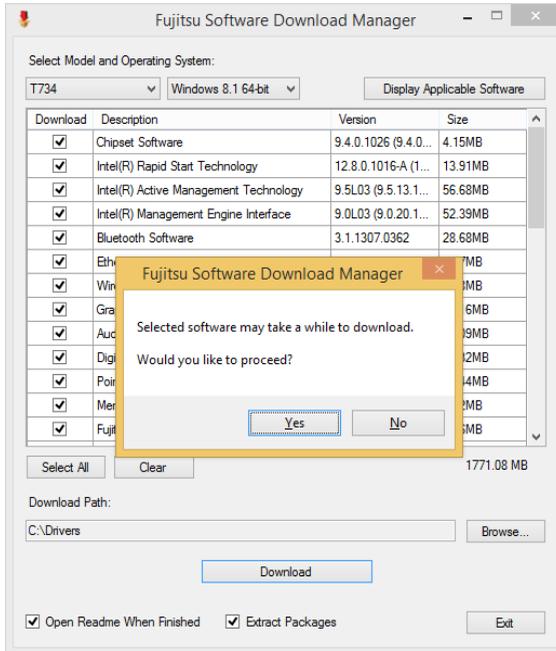
## Auto Download of Applicable Software from Support Website

1. Download the Fujitsu Software Download Manager (FSDM) from the [Support Site](#). FSDM assists you in downloading all the drivers applicable to the model and OS automatically.
2. FSDM can run on any Windows XP, Windows 7, Windows 8 / 8.1 system (not only the system being recovered).
3. Inside the FSDM software package, launch FSDM.exe as an Administrator.
4. Click *Yes* on the User Account Control dialog box.
5. Select the *Model* and *Operating System* from the dropdown boxes, then click *Display Applicable Software*.

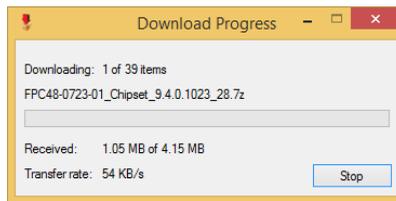


6. It is recommended that you download all the software by clicking *Select All*. You can also select each software item individually to download as necessary.
7. If you prefer to auto install all the software later on, it is important to select the *Fujitsu Software Auto Installer* package for download, and tick the *Open Readme When Finished* and *Extract Packages* checkboxes.
8. The default download location is C:\Drivers. You can change this path by clicking the *Browse* button.
9. Click the *Download* button to initiate downloading.

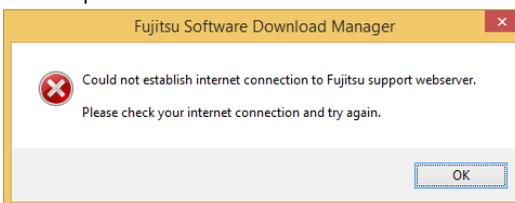
10. “Selected software may take a while to download. Would you like to proceed?” message appears. Select *Yes*.



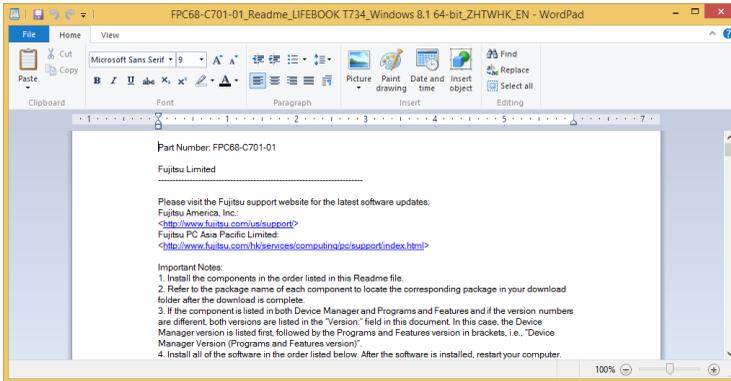
11. This will take some time to download the software packages. A message will be displayed during this time to show the download progress.



12. In the event that a problem occurs connecting to the download server, the message “Could not establish internet connection to Fujitsu support webserver. Please check your internet connection and try again.” appears. Click *OK* to dismiss it, then click *Download* again to resume the download queue.

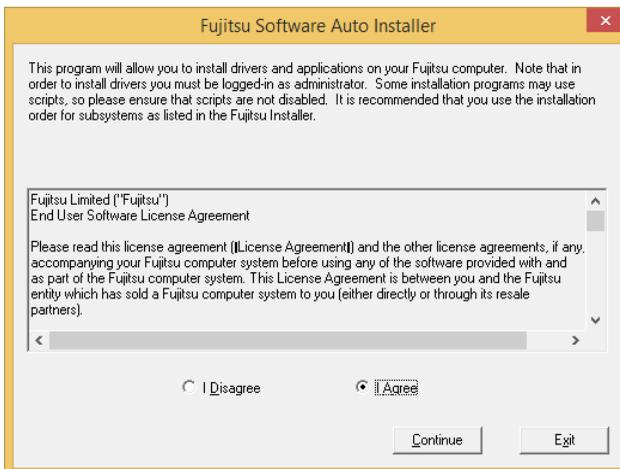


13. When the download has completed, if the *Open Readme When Finished* was checked, the software Readme document and the download folder will be displayed.

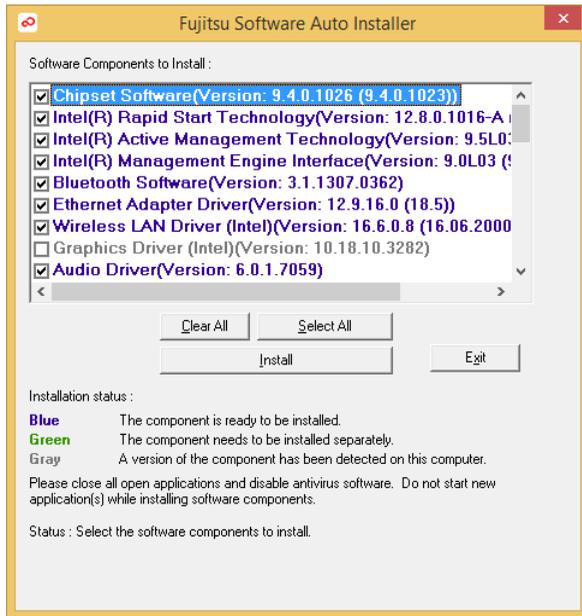


## Auto Installation Support for the Software Downloaded from Support Website

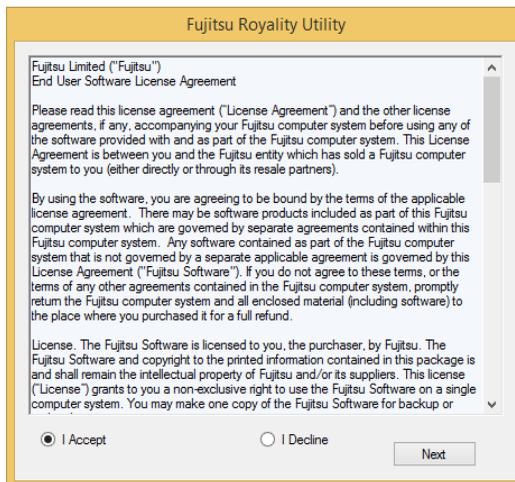
1. It is important to have the extracted Auto Installer software package folder and Readme file in the same location as other software folders. Otherwise auto-installation of the software will not be supported.
2. From the download folder, inside the Auto Installer software package, launch FjAutoInstall.exe as administrator.
3. Click *Yes* on the User Account Control dialog box. This will take some time to process the software packages. A message will be displayed during this time stating "Please wait while the content is being processed".
4. If EULA is displayed for Fujitsu Software Auto Installer, accept the EULA, otherwise continue.



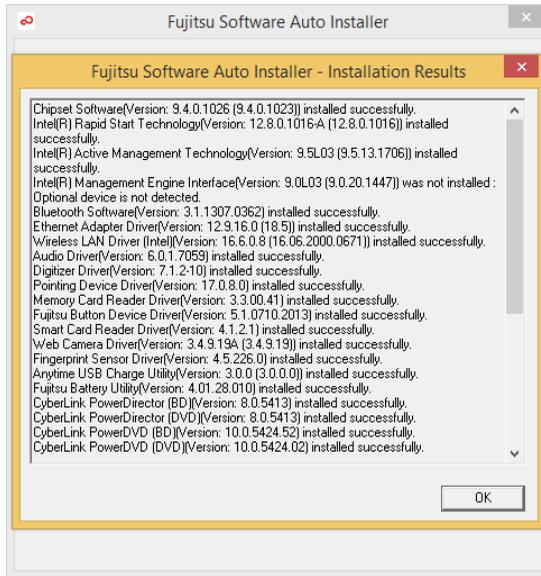
- The Fujitsu Software Auto Installer user interface will be launched providing the ability to auto install the software downloaded from [Support Site](#).
- It is recommended that you install all the software in the listed order by clicking *Select All*.



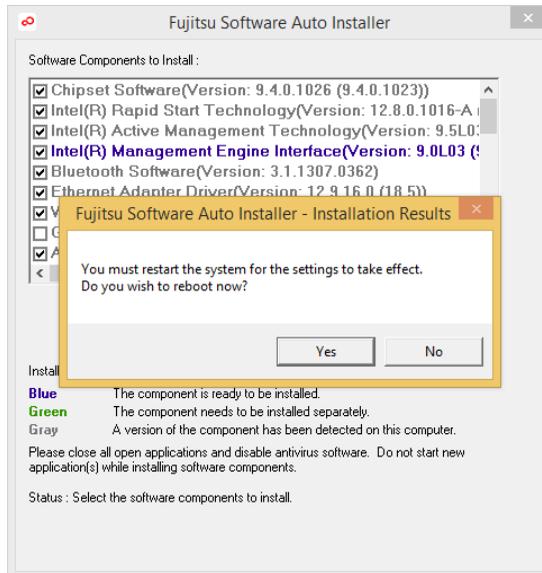
- Click the *Install* button to start the installation.
- EULA is displayed for any Fujitsu royalty software; accept the EULA to install the royalty software.



9. After installing all the selected drivers and software, the Installation Results window is displayed. Click *OK*.



10. "You must restart the system for the settings to take effect. Do you wish to reboot now?" message appears. Select *Yes*.



11. The system will now reboot.

### Downloading Driver Updates

To ensure that you always have the most current driver updates related to your system, you should occasionally access the Fujitsu Software Download Manager (FSDM) utility. The FSDM utility is available from the Fujitsu support site. FSDM will allow you to view and download a list of the most current drivers, utilities, and applications to determine whether you have the latest versions. To download the FSDM Utility, go to the support site:

### Support Site

<http://www.fujitsu-pc-asia.com/driversupport/selectioninterface/selection.html>