



Walt Disney World Swan and Dolphin Resort
Orlando, Florida

Large-Scale Deployment of Autodesk Inventor® Series/Professional

Matt Krupa - Parker Hannifin Corp.

MA34-4 Learn how to create and share network installations for deployment throughout a large corporation. Discuss the challenges and successes of deploying CAD software in a world-wide company.

About the Speaker:

Matt has been with Parker Hannifin for 9 years conducting training classes and implementing Autodesk Inventor throughout the corporation. A Certified Expert through Inventor 9, Matt is also instrumental in influencing the development of Inventor by attending Autodesk Gunslinger events as well as attending annual technology meetings with Autodesk.

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Parker Hannifin Corporation



We Learned from History

- The deployment of Inventor 9 and AutoCAD 2005 caused some confusion and generated several Parker Helpdesk issues.
- Corporate authored deployments took too long to download.
- European locations could not install in folders of their choice and could not set metric and DIN or ISO standards as defaults.
- These issues resulted in a loss of productivity and time.

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Our New Plans!

- Teach about the different installation options and help choose the most **efficient** one for our divisions.
- Teach how to build an installation deployment package.
 - Pointing to proper license servers in Data Centers.
 - Present options inside of a Silent Install.
- Once the system is installed:
 - Discuss options to optimize for best performance.

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Our Expected Benefits:

- Less time to deploy the software on multiple PC's using the Silent Install.
- All systems installed using the same configuration.
- Less calls to the Parker Helpdesk for installation issues.
- Satisfied employees.

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Major Topics of Discussion



Inventor 10 installation options

- License Management Tools
- Start stand-alone install and choose **Network** option.
- Install Autodesk Network Installation Wizard.
- Build an installation deployment for a **pull** installation.
- Note: Must have administrative rights to install!
- Users must have Power User rights.

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Installing and Configuring the FlexLM License Management Tools

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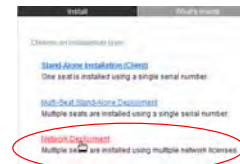
11

Inventor 10 Deployment



Setting up the License Managers

- Install the Network License Manager.
 - From the DVD welcome screen choose Network Deployment.



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Setting up the License Managers

- Choose Network License Manager which appears below Step 2 as shown.
 - This will install the FlexLM tools to serve licenses.
 - Must be installed on all servers that will distribute licenses.
 - At Parker, we use a Distributed License model (as will be discussed later)

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Setting up the License Managers

- Choose Network License Activation Utility which appears below Step 2 as shown.
 - This will install a wizard which will send your server information to Autodesk so you can receive a license file for each of your servers.

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Setting up the License Managers

- After Receiving License Files from Autodesk
 - Run the LMTOOLS from the Windows Start menu.

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Setting up the License Managers

- In the LMTOOLS, choose the Config Services tab and set the fields are required.
 - Check the boxes for Start Server at Power Up and Use Services.

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Setting up the License Managers

- In the LMTOOLS, choose the Server Status tab.
 - Pick the Perform Status Enquiry to ensure your licenses are running and available.

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Inventor 10 Stand-Alone Installation

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Inventor 10 for Network Licensing

- You can install Inventor 10 from the DVD without building a deployment.
 - Choose the Stand-Alone option to begin process.



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Inventor 10 for Network Licensing

- On the Stand-Alone Installation page, choose Autodesk Inventor 10:

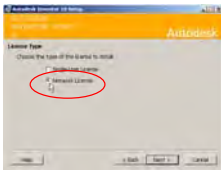


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Inventor 10 for Network Licensing

- During the install process, choose the option for Network licensing.
- No serial number will be necessary with this option.



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Inventor 10 for Network Licensing

- During the install process, we choose the Minimum option so the Content Library is not installed.
- The "Custom" option can also be chosen to install without the Content Center.



Inventor 10 Deployment



Install Inventor 10 without Content Center

- 2 ways to do such:
 - Minimum install or



- Custom install (remove Content)

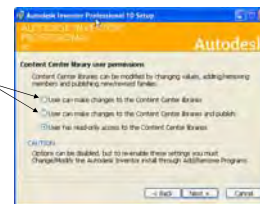


Inventor 10 Deployment



Important: Make sure Inventor 10 is installed with read-only access to Content Center libraries in the first step

Note: The two options to enable changes to the content library will create own MSDE instance INVENTORCONTENT. This should be avoided.



- If you choose a different option the installer will create a SQL instance INVENTORCONTENT



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Inventor 10 for Network Licensing

- Ensure Windows Environment Variable is set properly.
 - ADSKFLEX_LICENSE_FILE = @YOUR_SERVER1;@ YOUR_SERVER2;@ YOUR_SERVER3

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Inventor 10 Service Packs

- Apply appropriate Service Packs after installation.
 - SP's available from Autodesk's website.
 - [Click here for AIS10 SP's](#)
 - [Click here for AIP10 SP's](#)
- Note:
 - Inventor 10 SP's are incremental. SP1 must be installed before SP2 can be applied.

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Inventor 10 for Network Licensing

- After installing AIS10, a single icon to launch Inventor will be placed on the desktop:
 

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Inventor 10 for Network Licensing

- After installing AIP10, two icons to launch Inventor will be placed on the desktop:
 - One to launch Inventor and use an AIS10 license:
 
 - One to launch Inventor Professional and use an AIP10 license:
 

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Building an Inventor Network Deployment

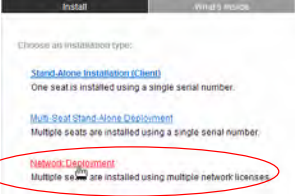
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Inventor 10 Deployment

Preparing to Create Installation Deployments

- Install the Autodesk Network Installation Wizard.
 - From the DVD welcome screen choose Network Deployment.

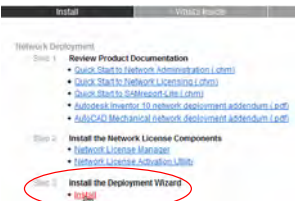


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Preparing to Create Installation Deployments

- Choose Install which appears below Step 3 Install the Deployment Wizard.
 - This will install the tools to allow you to create and edit deployments.



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Create Installation Deployments

- Create a Shared folder on the server where the deployment will be created.
 - Person installing needs full access to folder.

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Create Installation Deployments

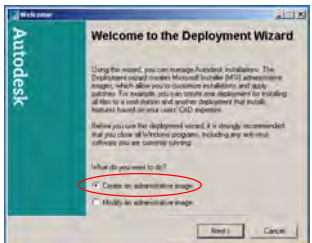
- From the Windows Start menu, choose Start > Programs > Autodesk > Deployment Wizard.



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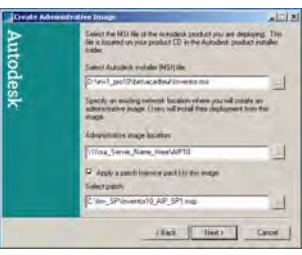
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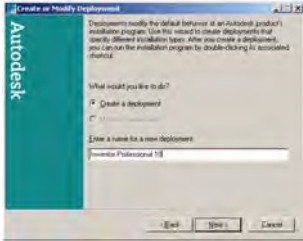
- To extract a .MSP file to include service pack in deployment
 - Download desired service pack and type the following line at a command prompt or in the Run field of the Start menu.
 - c:\Inv_SP\Inventor10_AIP_SP1.exe /e c:\Inv_SP\Inventor10_AIP_SP1.msp
 - Drive letter and directory name may vary.
- Can also use a Command window...
 
- Be sure to update deployments with each SP.
 - Do not skip SP's!

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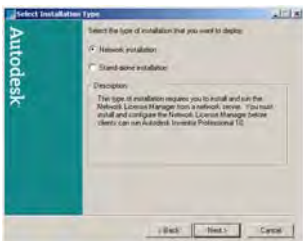
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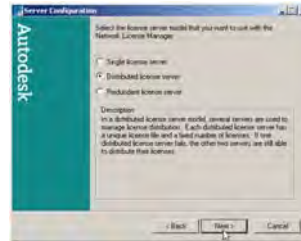
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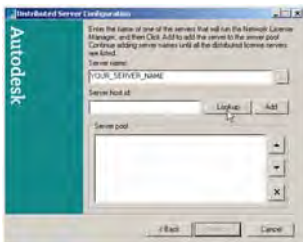


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- Type server name, choose Lookup, then choose Add.



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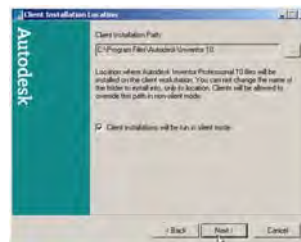
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Control Center Library user permissions

Control Center Library user permissions

Control Center libraries can be modified by changing values, adding/removing members and publishing new/revoked libraries.

Use user make changes to the Control Center libraries.

Use user make changes to the Control Center libraries and publish.

Use user read only access to the Control Center libraries.

CAUTION

Control can be disabled. Do to enable these settings you must Change/Protect the Autodesk Inventor install through Add/Remove Programs.

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Select the desired installation type

Select the desired installation type

Minimal The most common application features will be installed. This option is recommended for most users.

Complete All application features will be installed. This option is recommended for the best performance.

Custom Use this option to choose which application features you want installed and where they will be installed. Recommended for advanced users.

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Additional Client Settings

You can specify whether applications based on this deployment are executed if Microsoft Internet Explorer is not installed. Note that some features, such as the Autodesk Inventor Professional 10 help system, will not function properly if the Internet Explorer is not installed.

Internet Explorer required for installations.

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Install Additional Files

You can specify additional files to include with the deployment. By default, these files are installed in the Autodesk Inventor Professional 10 installation directory on client installations when the deployment is run. You can install files to multiple directories if desired.

While it is possible to install files to multiple drive locations (for example, to the C:\ and E:\ drives), care should be taken when doing so. In some cases, the drive might be mapped to a network location or hardware device on the client's system. In this scenario, it is usually safest to install files to a location within the Autodesk Inventor Professional 10 directory structure.

Select Files

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Select Files to Install

Address bar: \\Installation Directory

- Inventor 10
- Inventor 10 Tools
- Inventor 10 Help
- SETUP.LS1

Select Files Add Folder Add Drive Cancel

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Serial Number

Enter your product serial number in the space below. You can find the information on the product packaging. The serial number must contain a three-digit prefix followed by six right-digit numbers. This requirement is required by customer purchase authorization.

Serial Number: []

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Inventor 10 Deployment



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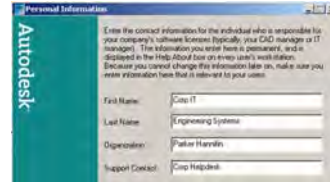
- Note:
 - For Inventor Series and AutoCAD Mechanical
 - Use SN XXX-XXXXXXXX
 - For Inventor Professional
 - Use SN YYY-YYYYYYY
 - IMPORTANT:**
 - DO NOT USE THE INVENTOR PROFESSIONAL SERIAL NUMBER FOR AUTOCAD MECHANICAL DEPLOYMENTS!!!!**
 - Use the AIS10 disk and SN!



Inventor 10 Deployment



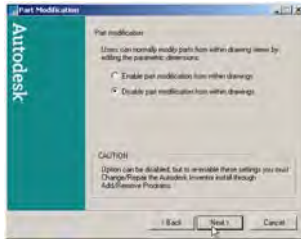
Create Installation Deployments



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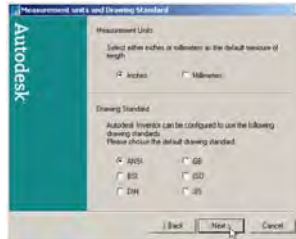
Create Installation Deployments



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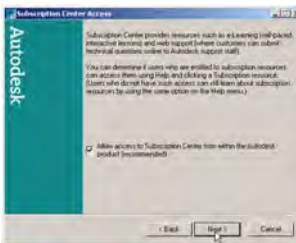
Create Installation Deployments



Inventor 10 Deployment



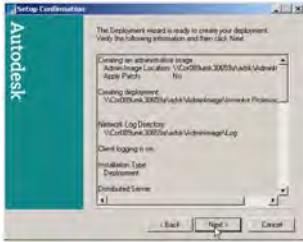
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Create Installation Deployments



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Create Installation Deployments

- To completely deploy AIP10, a second deployment of the Modules must be created.
- Use the Network Deployment Wizard and follow the same steps used to create an Inventor deployment.
- Both deployments need to be at the same SP level.
- Each deployment will take approximately 6 hours to build after all prompts are entered.

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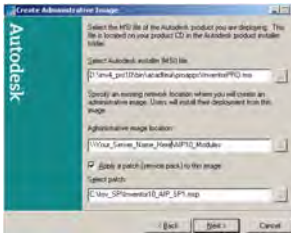
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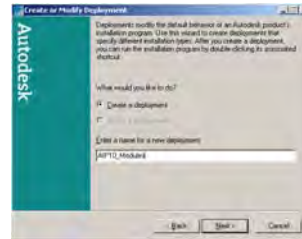
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Building an AutoCAD M Network Deployment

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AutoCAD M Deployment

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- Create Installation Deployments**
 - In order for AutoCAD Mechanical to recognize a network license, a deployment must be used.
 - Use the Network Deployment Wizard and follow the same steps used to create an Inventor deployment.
 - Ensure the Proper SP is being used.

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Create Installation Deployments

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Create Installation Deployments

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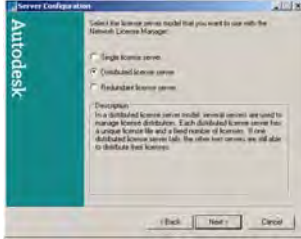
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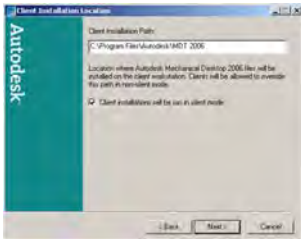
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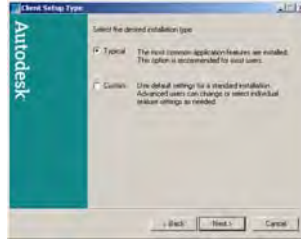
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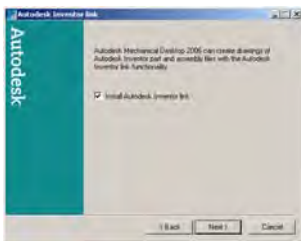
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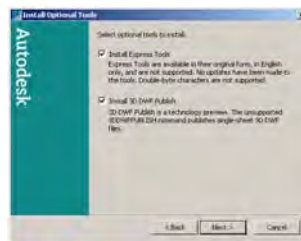
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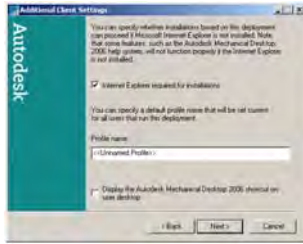
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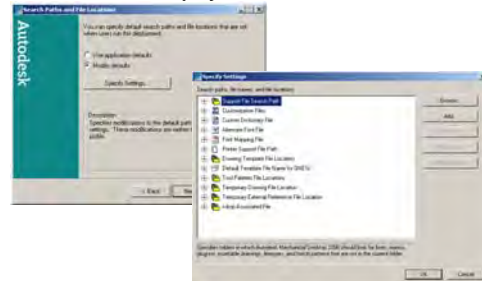
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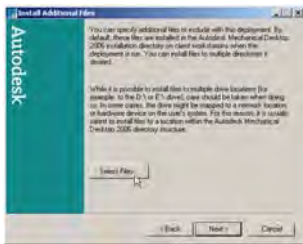
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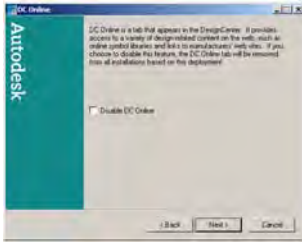
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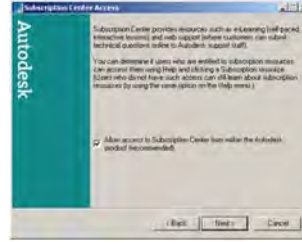
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Running the Deployments

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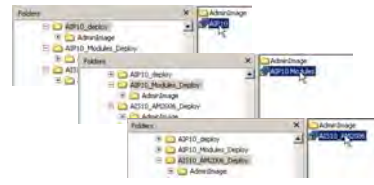
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Running the Deployments



Use Short-Cut to Install

- Activate the supplied short-cut to install Inventor, Inventor Professional Modules, and AutoCAD Mechanical.



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Copying and Editing Deployment Images

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Copying and Editing Deployments



Copying Installation Deployments

- Make a backup of the original deployment.
 - Burn to DVD
 - You will need the master to update deployments with future SP's.
- Copy the master deployment to a new server location.
- Edit the shortcut target to reflect new location.
- Edit the .INI file in the AdminImage folder and replace original server name with new name.
- Note:
 - Mapped drive letter may be used in lieu of server name for copies.

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Copying and Editing Deployments Parker anything possible

- Copying Installation Deployments
 - Properties of original shortcut target:



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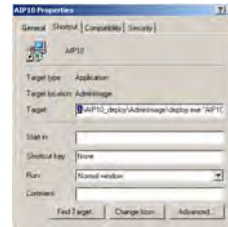
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- Copying Installation Deployments
 - Properties of copied shortcut target:



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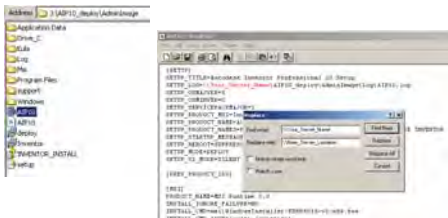
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- Copying Installation Deployments
 - Contents of original .INI file:



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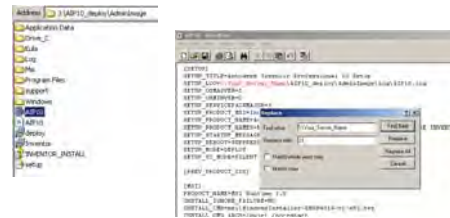
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Copying and Editing Deployments Parker anything possible

- Copying Installation Deployments
 - Contents of original .INI file:



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Copying and Editing Deployments Parker anything possible

- Copying Installation Deployments
 - When modifying the deployments with the Network Deployment Wizard
 - Must use original paths on server where the deployment was created.
 - New copies can be made and edited after the original is modified.

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Inventory Administration

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Inventor 10 Administration



Administration Objectives

- The primary objective is to familiarize the Inventor system administrator with new and recommended settings with regard to:
 - Graphics Settings
 - Project File Setup
 - Application Option Settings
 - Migration of Inventor Files.

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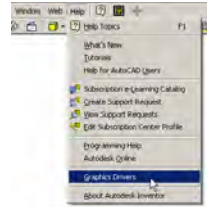


Graphic Settings



Graphic Drivers

- Help pull down menu
 - Graphic Drivers



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Graphic Settings



Graphic Drivers

- Live web link
- Choose the driver for your installed hardware.
 - The latest driver from the manufacturer may not always be the best choice.
 - Choose the Autodesk tested driver.
- Autodesk's recommendation is to uninstall previous driver completely before installing new driver.

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Project Files



Projects

- Parker Hannifin Recommendations
 - The use of a Single User Project File to work with Product Manager.
 - Training required for the Inventor / PM process for controlling WIP and Release of Inventor files.
 - We offer training to our employees using Microsoft Live Meeting and traditional classroom settings.

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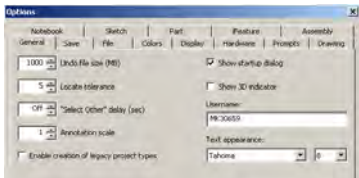


Application Options



Application Option Settings

- General Tab.



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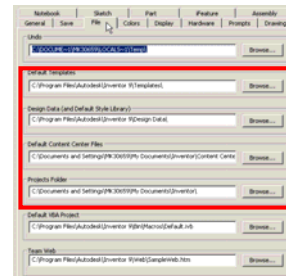


Application Options



Application Option Settings

- File Tab.



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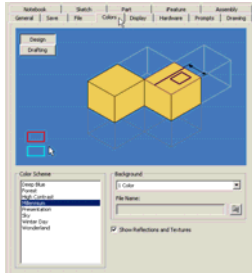


Application Options



Application Option Settings

- Colors Tab.



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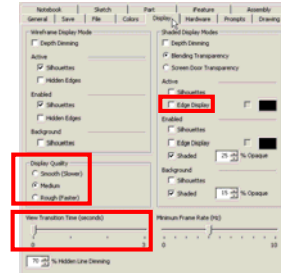


Application Options



Application Option Settings

- Display Tab.



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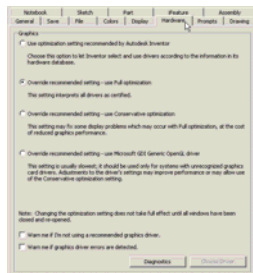


Application Options



Application Option Settings

- Hardware Tab.



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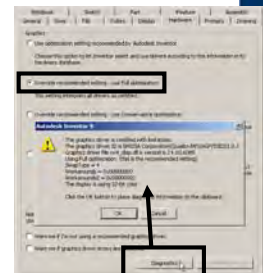


Application Options



Application Option Settings

- Hardware Tab.
- Diagnostics Tool.
- Inventor file must be open.



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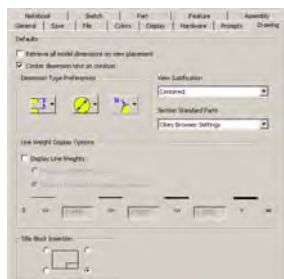


Application Options



Application Option Settings

- Drawing Tab.



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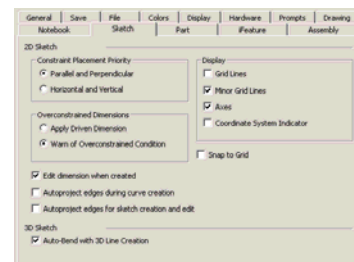


Application Options



Application Option Settings

- Sketch Tab.



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Migration



Migration of Inventor Files

- Backup existing data.
- Use the Task Scheduler Tool.



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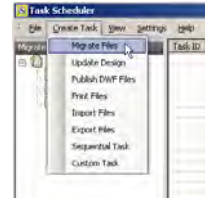
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Migration



Task Scheduler

- Creating a Task.



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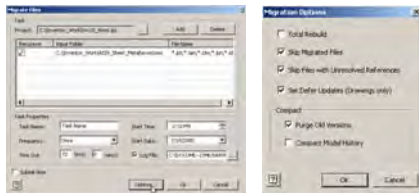
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Migration



Task Scheduler

- Recommended settings.



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Service and Representation



Once Inventor is deployed at Parker

- Training
 - Classroom and Web Sessions
 - Update, New User, Continuous Improvement
 - Support
 - National Corporate Helpdesk
 - Partnering
 - Working closely with Autodesk with the Interests of Parker Engineers at the same time helping Autodesk enhance Inventor!
- [Autodesk / Parker Success Story](#)

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