Predator DNC™ v11.0 – What's New

Latest features and benefits in v11.0

Before Installing v11.0

Predator DNC v11.0 requires Windows 10, 8, 7, XP, Vista, 2003 Server, 2008 Server, 2012 Server or 2016 Server. Existing customers that have older versions of Windows such as Windows 2000, 95, 98, ME or NT v4.0 must upgrade Windows prior to installing v11.0 of Predator DNC.

Microsoft Internet Explorer v5.x or later and the Microsoft .NET Framework 3.5 is required to be installed before installing Predator DNC v11.0.

Why v11.0?

By design, this release is intended to improve overall communications with Ethernet based CNCs, CMMs, 3D Printers, Robots and PLCs. New Ethernet based Predator Secure DNC technology has been developed to support a wide range of Windows based devices. New Ethernet based Predator Secure PLC technology has been developed to support a wide range of OPC DA based devices. Improvements to FTP, Fanuc Focas and a number of other objects have been updated. Finally, an updated user interface is also included. Details of what's new are explained throughout this document and within the online help.

Installing v11.0

Version 11 includes a single combined 32-bit and 64-bit Windows installation and is based on .MSI images. By default, installation occurs in the \program files (x86)\predator software\dnc 11.0\ folder. If you were previously running v10.x we recommend uninstalling v10.x prior to installing v11.0 but it is not required.

PXP files and PSF files created in older versions of Predator DNC are upgradeable to v11.x of Predator DNC. PXP files created in v11 are not compatible with v10.0 or older.

NOTE: Throughout this document Predator DNC is referenced and specific references to Predator DNC Express and Predator DNC Enterprise have been minimized to simplify the readability of this document. Not all features described within this document apply to all Predator editions.
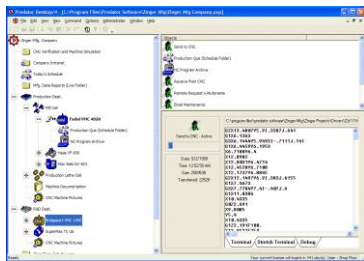
Predator DNC

V11.0 Serial Numbers and Access Codes

Version 11 includes a serial number and an access code that are required after the installation during registration of the software.

NOTE: Version 11 serial numbers must start with a 0B. If this is not the case contact us.

Network Installations of v11.0

By committing to store the product installation on a server, users will enjoy automatic healing of all critical files upon running Predator DNC. For example, suppose a user accidentally deletes pdnc.exe. Under normal circumstances he would be down and the software would fail to run. With v11.0 when the user double clicks the desktop shortcut all critical files are checked and if necessary, restored from the network server and the software begins to run automatically.

The easiest way to perform a network installation is to step through the following:

1. Copy the contents of the DVD to a \predator dvd images\DVD50\ or similar directory.

2. Run the setupdnc.exe from the DVD50 directory.

NOTE: Should any automatic healing be necessary, Predator DNC will be able to automatically extract the necessary files from the appropriate cab files stored in the DVD50 folder. If you install from a DVD, Predator DNC will be forced to prompt for the DVD.

What's New in v11.0?

New! Windows 10 Support

Support for Microsoft Windows 10 has been added to v11.0 of Predator DNC. This includes support for the x64 editions and the IoT Enterprise edition.

NOTE: Predator DNC is a 32-bit application and installation of Predator DNC under Windows 10 x64 bit edition defaults to the following folder

\program files (x86)\predator software\dnc 11.0\

New! Windows 2016 Server Support

Support for Microsoft Windows 2016 Server has been added to v11.0 of Predator DNC.

NOTE: Predator DNC is a 32-bit application and installation of Predator DNC under Windows 2016 Server x64 bit edition defaults to the following folder

\program files (x86)\predator software\dnc 11.0\

New! Microsoft SQL Server 2016 Support

Support for Microsoft SQL Server 2016 has been added with v11.0 of Predator DNC objects for MDC and PPM.

New! Microsoft SQL Server 2017 Support
Support for Microsoft SQL Server 2017 has been added with v11.0 of Predator DNC objects for MDC and PPM.

New! Oracle 13 Support
Support for the Oracle 13 database has been added to Predator DNC v11.

New! Microsoft SQL Server Express Support
Support for Microsoft SQL Server 2016 Express and 2017 Express has been added with v11.0 of Predator DNC objects for MDC and PPM. Support for this edition of SQL Server provides a free version of Microsoft SQL Server for small and medium manufacturers. The Express edition can be downloaded from Microsoft's web site.

New! Microsoft Access 2016 Support
Support for Microsoft Access 2016 has been added with v11.0 of Predator DNC objects for MDC and PPM.

New! Microsoft Access 2019 Support
Support for Microsoft Access 2019 has been added with v11.0 of Predator DNC objects for MDC and PPM.

New! Microsoft Excel 2016 Support
Support for Microsoft Excel 2016 has been added with v11.0 of Predator DNC object for Excel.

New! Microsoft Excel 2019 Support
Support for Microsoft Excel 2016 has been added with v11.0 of Predator DNC object for Excel.

New! 3D Printer Support
Predator DNC v11 has been enhanced to support file transfer to and from 3D printers. Support for ASCII and binary STL, OBJ, AMF and 3MF are supported.
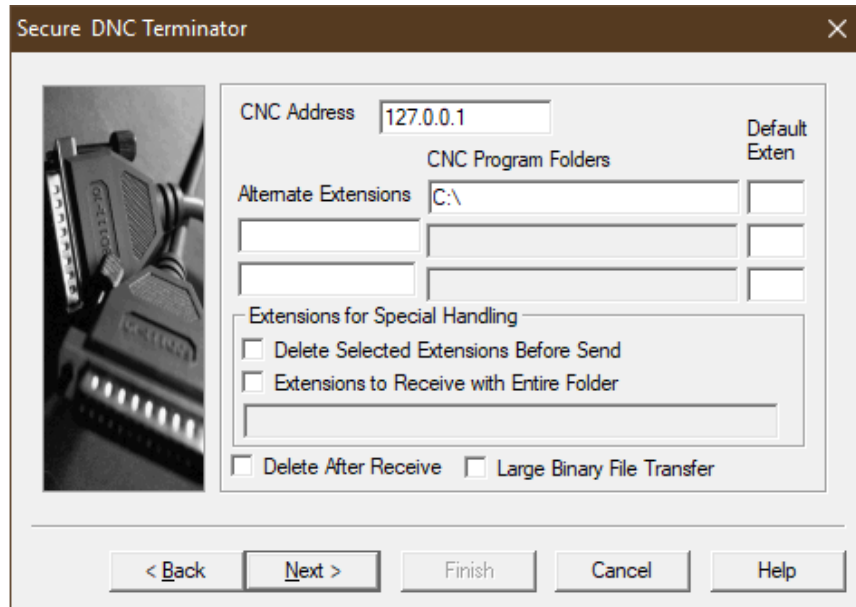
New! Unlimited Size File Support
Predator DNC v11 has been enhanced to support transfer of unlimited size files. Extensive testing with 32 GB files has been completed.

NOTE: Prior versions of Predator DNC had a maximum file size of 2 GB.
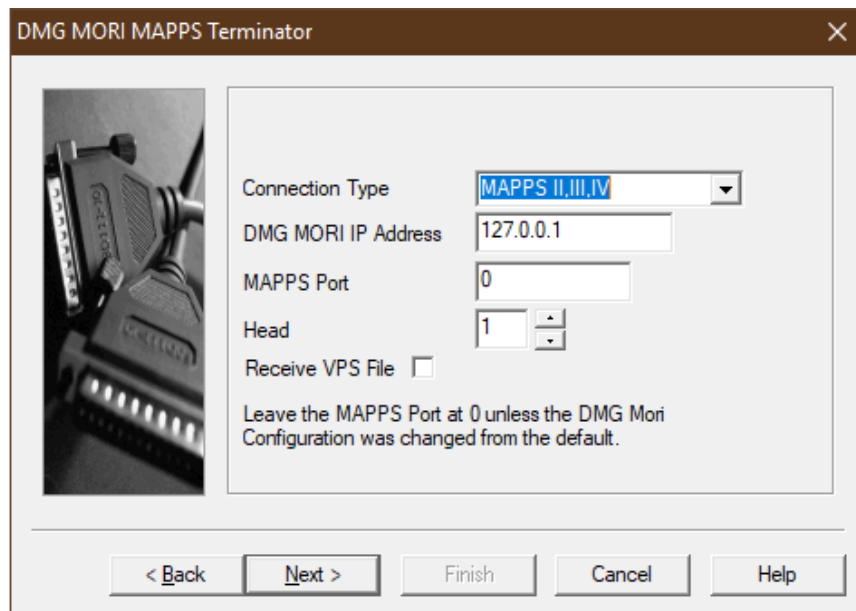
New! Predator Secure DNC
Support for Predator Secure DNC has been added in version 11 of Predator DNC. Predator Secure DNC technology supports all Windows 95 or newer based 3D Printers, CNCs, CMMs, Robots, PLCs and test stands. Predator Secure DNC eliminates CNCs, CMMs, Robots, PLCS and test stands from becoming members of the domain, eliminates Windows shares, eliminates FTP and eliminates CIFS, eliminates SMB1 which solves a number of security concerns. In addition, it adds powerful DNC features including automatic compression, encryption, delete prior to send, automatic rename, multiple destination folders, remote psdnc.exe updates, batch file operation and more.

Secure DNC Terminator

CNC Address: 127.0.0.1

CNC Program Folders

Default Exten

Alternate Extensions: C:\

Extensions for Special Handling
- ☐ Delete Selected Extensions Before Send
- ☐ Extensions to Receive with Entire Folder

☐ Delete After Receive   ☐ Large Binary File Transfer

< Back   Next >   Finish   Cancel   Help

New! DMG Mori Seiki MAPPS Ethernet Support

Support for Ethernet based DMG Mori Seiki machines with MAPPS I, II, III, IV, IV-S (Celos w/Fanuc) and V (Celos w/Mitsubishi) based CNCs has been added to Predator DNC v11. This allows Predator DNC to replace one or more DMG Mori CAPS Server installations and eliminate hybrid installs. Support for G code and VPS files are included.

DMG MORI MAPPS Terminator

Connection Type: MAPPS II,III,IV

DMG MORI IP Address: 127.0.0.1

MAPPS Port: 0

Head: 1

Receive VPS File ☐

Leave the MAPPS Port at 0 unless the DMG Mori Configuration was changed from the default.

< Back   Next >   Finish   Cancel   Help

New! Fanuc Focas v4.7 Support

Predator DNC v11 includes support for the latest Fanuc Focas v4.7 device drivers.

New! Cognex Dataman and Cognex MX Barcode Reader Support

Predator DNC v11 includes support for the Cognex Dataman and Cognex MX industrial bar code readers via Ethernet.

New! Fanuc Focas Data Terminator

Predator DNC v11 includes a new Fanuc Focas terminator for sending, receiving and erasing macro variables using a Predator standard neutral file format. Refer to the following example:

501=3.14
502=0
503=-3.14
504=

When the above file contents are sent to a Fanuc CNC, the following macro variables will be overwritten. Notice that 504 will be cleared (assigned a null value). Finally, an option to prevent macro variable file transfer while the Fanuc CNC is in production.

New! Danobat Fanuc Terminator

Predator DNC v11 includes a new Danobat terminator that automatically supports Danobat style CNC programs with multiple path definitions. Compatibility with Danobat's USB file format is standard. All file transfers are via Ethernet. Support for Fanuc based Danobat CNCs is standard. In addition, Predator DNC will automatically create a single file with Receive from CNC with multiple path support.
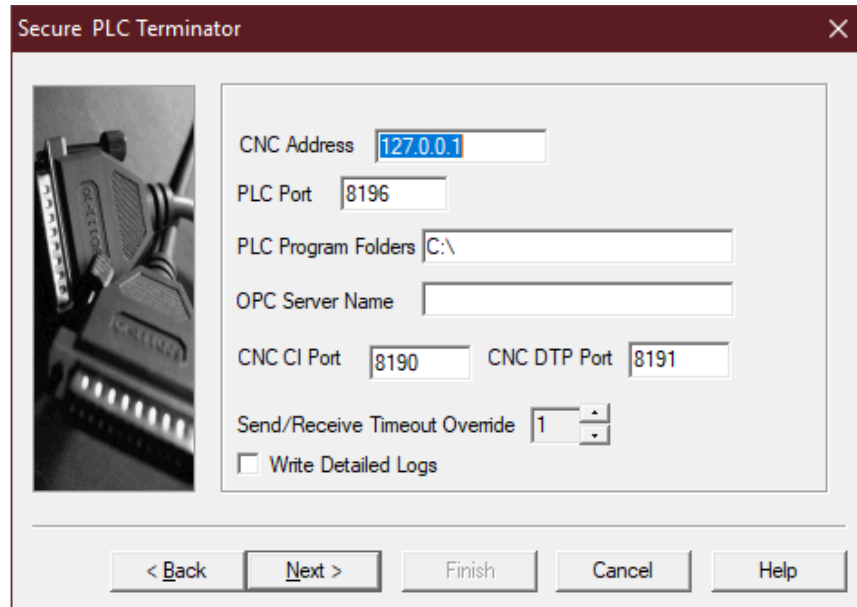
New! Device Write Terminator

Predator DNC v11 includes a new Device Write Terminator. The Device Write Terminator is an SDK example for experimental or testing purposes only. It is not intended to be used to solve real-world customer applications. For example, it can be used to test a hardware device which does not yet have a proper device driver.

New! Secure PLC Terminator

Predator DNC v11 includes a new Secure PLC terminator which supports Predator Software's PLC file format version 1.0.3 for reading and writing PLC registers via OPC DA and Ethernet. This allows for the transfer of specific PLC registers and their values or complete PLC recipes to and from PLCs and any other device such as CNCs, robots, 3D printers and test stands that support OPC DA. Here is an example recipe:

; First Recipe Example
501=True
502=3.1416
503=
504=42
DH1=$0D
DH2=$0A
DH3=$0D0AFF
/State/OpMode=1

New! File Transfer Viewer
Predator DNC v11 includes a new file transfer viewer. The font size can be adjusted and support for binary and text is included. Finally, the buffer size has been increased to 32k.

New! Default Toolbar Layout
Predator DNC v11 includes a new option to reset all toolbars back to a default position. This is done with the Default Toolbar Layout menu pick in the Options menu.

Improved! User Interface
Version 11 improves the user interface with updated color scheme, tool bar buttons and a new product logo.

Improved! FTP Client Terminator
Version 11 improves the FTP Client Terminator with support for passive mode. In addition, one or more files can be automatically deleted prior to Sending to the CNC. A new option to automatically Receive an entire folder has also been added. Another new feature in v11 is to automatically rename the CNC program to the O number during the transfer process. Finally, v11 adds the ability to automatically delete the CNC program on the CNC after a successful Receive from CNC.
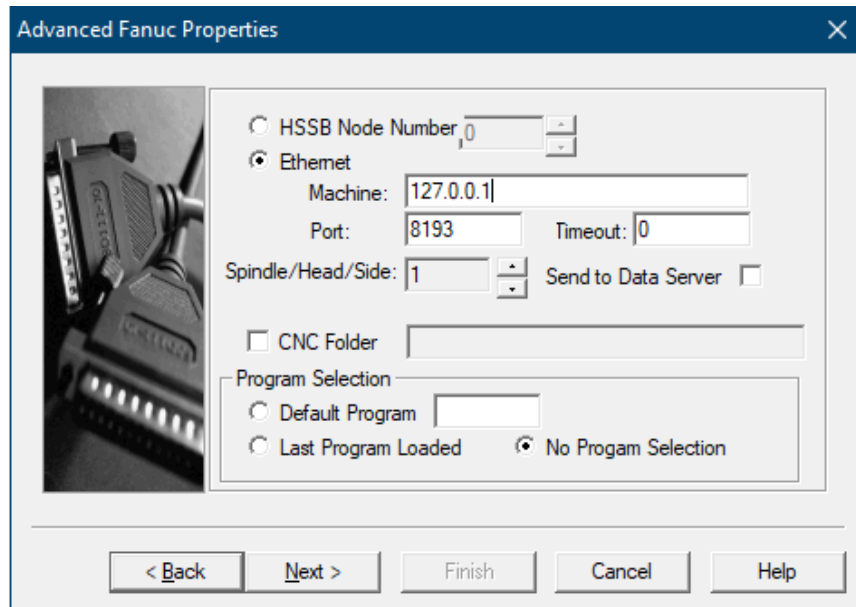
Improved! FTP Server Terminator
Version 11 of Predator DNC's FTP Server Terminator has been improved to support passive mode and the MKD command. Both of these new options improve FTP compatibility to support a great range of machines and equipment.

Improved! Fanuc Focas Terminator
Support for Fanuc Focas has been significantly improved with lots of new features while simplifying setup and configuration. Support for up to 32-character Fanuc Filenames has been added to v11 of Predator DNC. Refer to the following example:

```
%
<FILENAME.EXT>
T1M6
M30
%
```

Support for O numbers is still included and automatic detection of which style is standard. An option to automatically overwrite an existing CNC program has been added to eliminate the need to change the overwrite parameter. Support for newer Fanuc Data Servers have been added. Support for automatic deleting of CNC program(s) prior to send to CNC has been added. An option to preventing file transfer while the CNC is running has also been added. Finally, options to automatically select a CNC program after sending to the CNC have been added.

Improved! MDC for Microsoft Access Link
Version 11 improves the MDC for Microsoft Access Link to support Predator MDC V11 and newer versions of Microsoft Access.

Improved! COM Port HSM Terminator
Version 11 improves the COM Port HSM Terminator to reduce the offline retry timeout from 15 minutes to 2 minutes.

Improved! MDC for Microsoft SQL Link
Version 11 improves the MDC for SQL link to support Predator MDC V11 and newer versions of Microsoft SQL Server.

Improved! MDC for Oracle Link
Version 11 improves the MDC for Oracle Link to support Predator MDC v11 and newer versions of Oracle.

Improved! Predator MDC Support
Predator DNC v11 supports v10 of Predator MDC for manufacturing data collection.

Improved! FLM Licensing

Version 11 improves floating network licensing to support FIPS 2.0 enabled networks.

Improved! Online Help

Predator DNC v11 includes new online help topics, frequently asked questions and improves many existing help topics with additional content. Online help for all 116 DNC objects have been improved.

Includes Predator CNC Editor v11.0

Predator DNC v11 includes Predator CNC Editor v11. For complete details on Predator CNC Editor refer to the what's new document.

NOTE: The Predator CNC Editor v11 also includes the Predator Virtual CNC v11 for backplotting. For complete details on Predator Virtual CNC v11 refer to the what's new document.

For the latest on Predator DNC, check our web site at
http://www.predator-software.com