



Predator MDC™ v9.0 – What's New

Latest features and benefits in v9.0

Before Installing v9.0

Predator MDC v9.0 requires Windows 2000, XP, 2003 Server, 2008 Server or Vista. Existing customers that have older versions of Windows such as Windows 95, 98, ME or NT v4.0 must upgrade prior to installing v9.0 of Predator MDC.

Existing MDC customers should backup the database prior to upgrading. Predator MDC Administrator v9.0 will upgrade the database automatically from older v1.x, v2.x, v3.x, v7.x or v8.x versions to v9.0. After the database has been upgrade to v9.0 older versions of Predator MDC will not be able to use the database.

Microsoft Internet Explorer v5.x or later and the Microsoft .NET Framework 2.0 is required to be installed before installing Predator MDC v9.0.

Why v9.0?

By design, the primary goal of this release is intended to provide more insight to shop floor productivity. Significantly 684 new reports and charts have been added for a total of 1324. In addition, we have significantly improved Predator MDC to support more dashboard and digital signage applications. Numerous new features and improvements have been added for better data collection and day to day operation. Along the way support for Windows 2008 Server and Microsoft SQL Server 2008 have been added. Details of what's new are explained throughout this document and within the online help.

Installing v9.0

The v9 installation is based on a single .MSI image and .CAB files have been eliminated. If you are running Windows 98, ME or NT v4.0 you must upgrade to Windows 2000, XP, 2003 Server or Vista prior to installing v9.0 of Predator MDC.

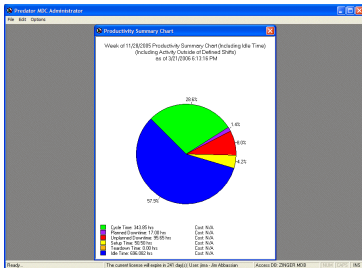
NOTE: Predator MDC Service and Predator MDC for DOS are installed automatically with Predator MDC. Like other DOS applications Predator MDC for DOS does not run under Windows Vista x64.

By default installation occurs in the \program files\predator software\mdc 9.0 directory. If you were previously running v8.x we recommend uninstalling v8.x prior to installing v9.0.

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Predator MDC



V9.0 Serial Numbers and Access Codes

Version 9 includes a serial number and an access code that are required after the installation during registration of the software.

NOTE: The serial number must start with 09 if this is not the case contact us.

Network Installations of v9.0

By committing to store the product installation on a server, users will enjoy automatic healing of all critical files upon running Predator MDC. For example, suppose a user accidentally deletes pmcdc.exe. Under normal circumstances he would be down and the software would fail to run. With v9.0 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 CD to a \predator cd images\CD39\ or similar directory.
2. Run the setupmcdc.exe from the CD39 directory.

NOTE: Should any automatic healing be necessary, Predator MDC will be able to automatically extract the necessary files from the appropriate files stored in the CD39 directory. If you install from a CD, Predator MDC will be forced to prompt for the CD.

What's New in v9.0?

New! Microsoft Windows 2008 Server Support

Support for Microsoft Windows 2008 Server has been added with v9.0 of Predator MDC.

New! Microsoft SQL Server 2008 Support

Support for Microsoft SQL Server 2008 has been added with v9.0 of Predator MDC.

New! Microsoft SQL Server 2008 Express Support

Support for Microsoft SQL Server 2008 Express has been added with v9.0 of Predator CNC Editor Enterprise. 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! View Data Collection Errors

A new View > Data Collection Errors menu has been added to v9.0 of Predator MDC. This new option allows all data collection errors to be viewed prior to fixing the errors.

New! Report Date Ranges

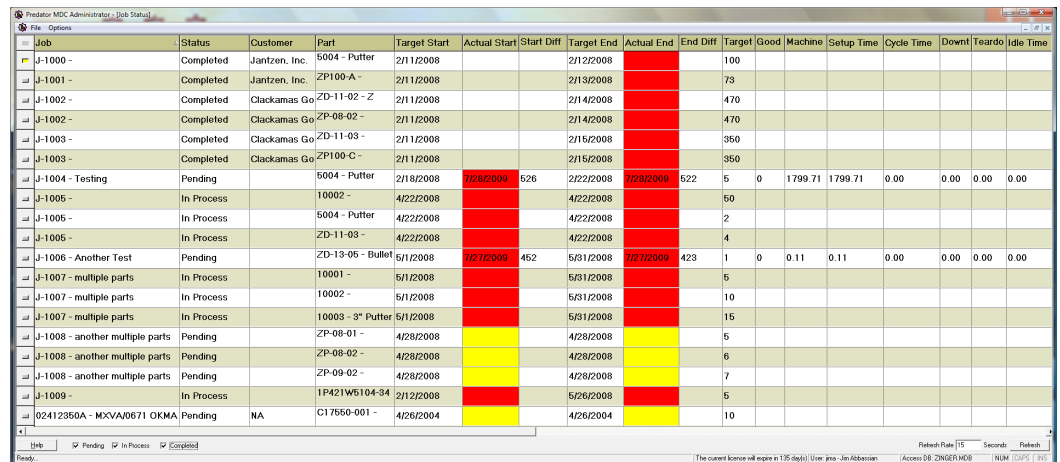
Most reports have been redesigned with specific From and To Dates. This is more flexible than the previous method. Custom date ranges can now be specified along with 12 new shortcuts including Today, Yesterday, This Week, Last Week, Last 7 days, Last 30 days, This Month, Last Month, This Quarter, Last Quarter, This Year and Last Year.

New! Chart Date Ranges

Most charts have been redesigned with specific From and To Dates. This is more flexible than the previous method. Custom date ranges can now be specified along with 12 new shortcuts including Today, Yesterday, This Week, Last Week, Last 7 days, Last 30 days, This Month, Last Month, This Quarter, Last Quarter, This Year and Last Year.

New! View Job Status

Predator MDC v9.0 adds a new View Job Status dashboard displaying jobs, job status, customer, part number, target start, actual start, target end, actual end, target quantities, good parts, machine time, setup time, cycle time, downtime, teardown time and idle time. Actual start and end dates are automatically color coded to indicate on time, not started or late. Job filters for pending, in-process and completed can narrow the number of jobs displayed. Real-time updates every X seconds are supported. Columns can be hidden. Options for changing the font and status colors are included. Preferences are automatically saved per user. The View Job Status dashboard is designed to support LCD and Plasma based digital signage.



Job	Status	Customer	Part	Target Start	Actual Start	Start Diff	Target End	Actual End	End Diff	Target	Good	Machine	Setup Time	Cycle Time	Downtime	Teardown	Idle Time
J-1000 -	Completed	Jantzen, Inc.	5004 - Putter	2/11/2008			2/12/2008			100							
J-1001 -	Completed	Jantzen, Inc.	ZP100-A -	2/11/2008			2/13/2008			73							
J-1002 -	Completed	Clackamas Go	ZD-11-02 - Z	2/11/2008			2/14/2008			470							
J-1002 -	Completed	Clackamas Go	ZP-08-02 -	2/11/2008			2/14/2008			470							
J-1003 -	Completed	Clackamas Go	ZD-11-03 -	2/11/2008			2/15/2008			350							
J-1003 -	Completed	Clackamas Go	ZP100-C -	2/11/2008			2/15/2008			350							
J-1004 - Testing	Pending		5004 - Putter	2/18/2008	7/28/2009	526	2/22/2008	7/28/2009	522	5	0	1799.71	1799.71	0.00	0.00	0.00	0.00
J-1005 -	In Process		10002 -	4/22/2008			4/22/2008			50							
J-1005 -	In Process		5004 - Putter	4/22/2008			4/22/2008			2							
J-1005 -	In Process		ZD-11-03 -	4/22/2008			4/22/2008			4							
J-1006 - Another Test	Pending		ZD-13-05 - Bullet	5/1/2008	7/27/2009	452	5/31/2008	7/27/2009	423	1	0	0.11	0.11	0.00	0.00	0.00	0.00
J-1007 - multiple parts	In Process		10001 -	5/1/2008			5/31/2008			5							
J-1007 - multiple parts	In Process		10002 -	5/1/2008			5/31/2008			10							
J-1007 - multiple parts	In Process		10003 - 3" Putter	5/1/2008			5/31/2008			15							
J-1008 - another multiple parts	Pending		ZP-08-01 -	4/28/2008			4/28/2008			5							
J-1008 - another multiple parts	Pending		ZP-08-02 -	4/28/2008			4/28/2008			6							
J-1008 - another multiple parts	Pending		ZP-09-02 -	4/28/2008			4/28/2008			7							
J-1009 -	In Process		1P421W5104-34	2/12/2008			5/26/2008			5							
02412350A - MXXA0671 OKMA	Pending	NA	C17550-001 -	4/26/2004			4/26/2004			10							

New! View Job Status Command Line

Predator MDC v9.0 adds a new View Job Status command line. Creating a Windows shortcut with this command line can facilitate digital signage. Refer to the following examples:

```
pmdc.exe -jobstatus
```

```
pmdc.exe -user jima -password predator -jobstatus
```

New! View Part Status

Predator MDC v9.0 adds a new View Part Status dashboard displaying parts, actual start, actual end, good parts, machine time, setup time, cycle time, downtime, teardown time and idle time. Part filters for active parts and date ranges narrow the number of parts displayed. Real-time updates every X seconds are supported. Columns can be hidden. Options for changing the font are included. Preferences are automatically saved per user. The View Part Status dashboard is designed to support LCD and Plasma based digital signage.

New! View Part Status Command Line

Predator MDC v9.0 adds a new View Part Status command line. Creating a Windows shortcut with this command line can facilitate digital signage. Refer to the following examples:

```
pmdc.exe -partstatus
```

```
pmdc.exe -user jima -password predator -partstatus
```

New! Setup Cycle Status Locking

A new option allows setup time to be locked within v9.0 of Predator MDC. When setup time is locked cycle starts and cycle ends will be discarded and the machine will stay in setup until a setup end, machine downtime start or teardown start is received.

NOTE: This option can be enabled within the Predator MDC Database Service Manager.

New! Teardown Cycle Status Locking

A new option allows teardown time to be locked within v9.0 of Predator MDC. When teardown time is locked cycle starts and cycle ends will be discarded and the machine will stay in teardown until a teardown end, machine downtime start or setup start is received.

NOTE: This option can be enabled within the Predator MDC Database Service Manager.

New! Machine Downtime Status Locking

A new option allows individual machine downtimes to be locked within v9.0 of Predator MDC. When a specific machine downtime is locked cycle starts and cycle ends will be discarded and the machine will stay in the specific machine downtime until a machine downtime end, teardown start or setup start is received.

NOTE: This option can be enabled within the Predator MDC Database Service Manager.

New! 14 Good vs. Scrapped Charts

Fourteen new bar charts displaying good and scrapped quantities have been added to v9.0 of Predator MDC. Clicking on the bar will display a tool tip. These new charts are grouped by department, location, group, machine, shift, user, part type, part, job, operation, daily, weekly, monthly and quarterly.

New! 14 Finished vs. Unfinished Charts

Fourteen new bar charts displaying finished and unfinished cycles have been added to v9.0 of Predator MDC. Clicking on the bar will display a tool tip. These new charts are grouped by department, location, group, machine, shift, user, part type, part, job, operation, daily, weekly, monthly and quarterly.

New! 14 Hours Summary Charts

Fourteen new bar charts displaying hour summaries have been added to v9.0 of Predator MDC. Clicking on the bar will display a tool tip. These new charts are grouped by department, location, group, machine, shift, user, part type, part, job, operation, daily, weekly, monthly and quarterly.

New! 14 Cycles and Parts Charts

Fourteen new bar charts displaying cycles and part quantities have been added to v9.0 of Predator MDC. Clicking on the bar will display a tool tip. These new charts are grouped by department, location, group, machine, shift, user, part type, part, job, operation, daily, weekly, monthly and quarterly.

New! 4 Machine Time and Cost Charts

Four new bar charts displaying Machine Time and Cost charts have been added to v9.0 of Predator MDC. These new charts are grouped by daily, weekly, monthly and quarterly.

New! 4 Machine Downtime and Cost Charts

Four new bar charts displaying Machine Time and Cost charts have been added to v9.0 of Predator MDC. These new charts are grouped by daily, weekly, monthly and quarterly.

New! 14 Scrap Code Summary Charts

Fourteen new bar charts displaying scrap code summaries have been added to v9.0 of Predator MDC. Clicking on the bar sections will display a tool tip. These new drilldown style bar charts are grouped by department, location, group, machine, shift, user, part type, part, job, operation, daily, weekly, monthly and quarterly. The consolidate style is a pie chart as it was in previous versions.

New! 10 Trend Analysis Charts

Ten new trend analysis charts displaying plot and area style charts have been added to v9.0 of Predator MDC. Clicking on a plot point will display a tool tip. These new drilldown style bar charts are grouped by department, location, group, machine, shift, user, part type, part, job, and operation. The consolidate style is a plot and area style chart as it was in previous versions.

New! 4 Performance Ranking Charts

Four new bar charts displaying Performance Ranking charts have been added to v9.0 of Predator MDC. These new charts are grouped by daily, weekly, monthly and quarterly.

New! Vertical / Horizontal Style Charts

New vertical / horizontal style right mouse options have been added to all Machine Time and Cost charts, Machine Downtime and Cost charts, Scrap Code Summary charts and Performance Ranking charts within v9.0 of Predator MDC. Right click on any chart to set the landscape option. This new chart preference is automatically saved per windows user.

New! Landscape Style Charts

New landscape style option has been added to all charts. Right click on any chart to set the landscape option within v9.0 of Predator MDC. This new chart preference is automatically saved per windows user.

New! Predator PDM Compatibility

Support for Predator PDM v9 has been added with v9.0 of Predator MDC.

New! 100 Production Detail Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new Production Detail reports within v9.0 of Predator MDC.

New! 100 Scrap Code Summary Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new Scrap Code Summary reports within v9.0 of Predator MDC.

New! 100 Machine Downtime Summary Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new Machine Downtime reports within v9.0 of Predator MDC.

New! 100 User Downtime Summary Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new User Downtime reports within v9.0 of Predator MDC.

New! 100 Machine Time Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new Machine Time reports within v9.0 of Predator MDC.

New! 100 Machine Cost Reports

A hundred new sub group combination reports have been added via two levels of sub groups including By Department, By Location, By Group, By Part Type, By Part, By Job, and By Operation. These new sub groups provide over 100 new Machine Cost reports within v9.0 of Predator MDC.

New! Missing Realtime Data Report

A new Missing Realtime data report has been added to the Administrator menu. This report identifies missing components such as part numbers, jobs, and users that have not been added to Predator MDC but data collection has occurred. This report reviews all of the data collection errors to identify the specific components that need to be added. Once these missing components have been entered within Predator MDC the Reprocess Data Collection Errors command can be run to automatically cleanup the data collection errors.

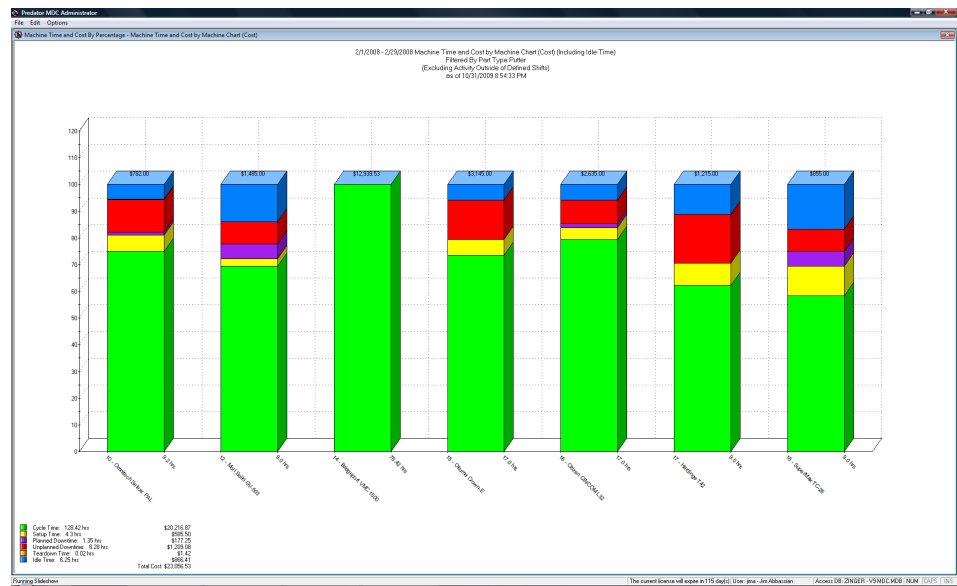
New! Add to Automation

Most charts can now be automated within a continuous real-time slide show. Digital signage can be setup with a low cost PC and Predator MDC Client. From within most charts simply select Add to Automation from the File menu. A dialog with options to save the file, display time and title can be specified.

New! Slide Show Mode

Predator MDC v9.0 adds a new real time Slide Show mode of operation. This mode is initialized with the `-slideshow` command line. While running in this mode Predator MDC will continuously loop through the charts specified within the automation text file. The title and amount of time each chart is displayed is also configured within the automation text file. This file can be edited offline with the Predator CNC Editor or any 3rd party text editor. Pressing the Esc key will exit this mode and return to standard operation. While in slide show mode you can push the Pg Up and Pg Dn keys to skip backwards or forwards to the next chart. The current chart can be printed by right clicking and selecting Print.

NOTE: Typically a dedicated PC is provided for digital signage and it is recommended that toolbars, status bars and other screen elements be disabled in a digital signage setup. Charts are displayed in full screen but it is recommended that all bar charts be displayed horizontally. This is especially true with 16:9 style wide screen displays.



New! Slide Show Command Line

Predator MDC v9.0 adds a new Slide Show command line. This command line requires an automation text file to be referenced after the `-slideshow` command line. Creating a Windows shortcut with this command line can facilitate digital signage. Refer to the following examples:

```
pmdc.exe -slideshow automation.txt
```

```
pmdc.exe -user jima -password predator -slideshow automation.txt
```

New! Reprocess Data Collection Errors

A new Reprocess Data Collection Errors has been added to the Administrator menu. This command fixes data collection errors after the administrator fixes missing components such as part numbers, jobs, and users. The overall procedure to fix data collection errors should be the following:

1. From the Administrator menu select Missing Realtime Data Report
2. Add the missing component(s) identified in step 1
3. From the Administrator menu select Reprocess Data Collection Errors
4. From the View menu select View Data Collection Errors
5. From the Process menu select Fix Data Collection Errors

Take note of what data collection errors are occurring. Often these issues can be minimized with additional training and improved procedures. The new tools within Predator MDC v9 simplify overall administration of data collection errors.

New! Import Errors Report

A new Errors report has been added to the Import wizard within v9.0 of Predator MDC. This report will provide a list of all the import errors that Predator MDC identifies. This reduces the trial an error process when cleaning up bad csv files.

New! Remember Password

A new Remember Password option has been added to v9.0 of Predator MDC. Enabling this option will automatically logon the user to Predator MDC. The password is stored in a secure manor per Windows user.

New! Job Status and Part Status Toolbar Buttons

Two new toolbar buttons have been added for Job Status and Part Status dashboards.

New! User Object within MDC APIs

A new user object has been added to v9.0 of Predator MDC API to allow Predator users to be created, edited and deleted. These new methods can provide a more robust integration with ERP, MES and other business systems.

New! LastLogin API

A new lastlogon API has been added which requires the Remember Password option be enabled. The advantage of this method is that database and user credentials are not visible within a vbscript, VBA macro, windows script or jsript.

New! Solidworks eDrawings Support

Predator MDC includes Solidworks 2010 eDrawings support for viewing Solidworks assemblies, parts and drawings. In addition Autocad DWG and DXF files are supported.

New! Microsoft Visio Support

Predator MDC includes Microsoft Visio support for viewing Microsoft Visio drawings.

Improved! Microsoft Word Support

Predator MDC includes Microsoft 2007 Word support for viewing Microsoft Word, Wordperfect, Works and RTF documents.

Improved! Microsoft Excel Support

Predator MDC includes Microsoft 2007 Excel support for viewing Microsoft Excel spreadsheets.

Improved! Microsoft Powerpoint Support

Predator MDC includes Microsoft 2007 Powerpoint support for viewing Microsoft presentations.

Improved! Adobe Acrobat Reader Support

Predator MDC includes Adobe Acrobat Reader v9.2 for viewing PDF documents. This includes 3D PDFs.

Improved! Machine Status Toolbar Button

The Machine Status toolbar button has been improved to be similar to the new Job Status and Part Status toolbar buttons.

Improved! Importing

Importing CSV files has been improved to automatically create new components or update existing components with new details. New checkbox options have been added to ignore errors and to display an error report. The ignore errors option can be used when the csv file contains known errors that you don't want to fix and you wish to force the import to continue with the remaining good data. The error report allows you to quickly fix a number of errors within a csv file prior to importing the csv file.

Improved! OEE Report

Improved OEE report by eliminating <No Part> details.

Improved! Trend Analysis Charts

All Trend Analysis charts have been improved with Daily, Weekly, Monthly and Quarterly options. In addition Next Set and Previous Set chart right mouse shortcuts have been added when drilldown style charts are displayed. Finally, keyboard shortcuts for home, end, pg dn and pg up keys have been added when drilldown style charts are displayed.

Improved! Predator MDC Service

The Predator MDC Service has been improved to support optional setup, teardown and machine downtime style cycle locking.

Improved! Machine and Job Status Panel

The machine status and job status panel has been improved to display the number of data collection errors.

NOTE: Machine Status Panel is not available with Predator MDC Express.

Improved! Productivity Summary Chart

The Productivity Summary Chart has been improved with a new right mouse option called Show Cost. Toggling this option will enable or disable the display of costs.

Improved! Machine Time and Cost Chart

The Machine Time and Cost Chart has been improved with a new right mouse option called Show Cost. Toggling this option will enable or disable the display of costs. In addition, the order of setup time and cycle time have been swapped to better drive improvements to cycle time and to group all down times together.

Improved! Machine Downtime and Cost Chart

The Machine Downtime and Cost Chart has been improved with a new right mouse option called Show Cost. Toggling this option will enable or disable the display of costs.

Improved! Event Time Analysis Chart

The Event Time Analysis Chart has been improved with new right mouse tool tips displaying the parameter field for machine downtimes, user downtimes, job numbers and part numbers.

Improved! Machine Events Report

The Machine Events Report has been improved with a new difference column and improved layout for enhanced readability.

Improved! Fix Data Collection Errors Wizard

The Fix Data Collection Errors Wizard has been improved to automatically fix some errors within v9.0 of Predator MDC.

Improved! Select Criteria Right Mouse Menu

The Select Criteria right mouse menu is now always the first item in all charts. This makes it easier to change filters, date ranges and other options.

Improved! Pulldown Performance

Pulldowns for departments, locations, groups, machines, part types and parts have been improved for greater performance with large datasets within all dialogs. For example 100,000+ part numbers can be selected and changed in less than 1 second. Support for up arrow, down arrow, pg up, pg dwn, ctrl+up arrow and ctrl+down arrow has been improved within pulldowns as well.

Improved! MDC for Haas

The MDC for Haas object has been improved to support Haas machines running in Spanish.

Improved! Quality % Calculations

Improved quality % calculations when zero good parts and zero scrapped parts occur. In previous versions Predator MDC would report a quality of 0%. In this case Predator MDC v9.0 calculates a quality of 100%. In v9.0 the only time 0% quality is reported or charted is when zero good parts and one or more scrapped parts occur.

Improved! Overlapping Shifts

Support for overlapping shifts has been improved.

Improved! Machine Hours with Hours Summary Chart

Support for machine hours within the Hours Summary Chart has been improved.

Improved! Predator CNC Editor Enterprise Compatibility

Support for Predator CNC Editor Enterprise v9 has been improved with v9 of Predator MDC.

Improved! Predator DNC Compatibility

Support for Predator DNC v9 has been improved with v9 of Predator MDC.

Improved! Predator Travelers Compatibility

Support for Predator Travelers v9 has been improved with v9 of Predator MDC.

Improved! Predator Tracker Compatibility

Support for Predator Tracker v9 has been improved with v9 of Predator MDC.

Improved! Predator Virtual CNC Compatibility

Support for Predator Virtual CNC v9 has been improved with v9 of Predator MDC.

Improved! Chinese Language Support

Support for Chinese has been improved with v9 of Predator MDC.

Improved! HTML based Online Help

Updated online help expands several topics with new details.

Bug Fix! SIM ID Button

Predator MDC v9.0 fixes a bug displaying the SIM number of remote SIMs within Windows Remote Desktop.

For the latest on Predator MDC, check our web site at

<http://www.predator-software.com>