IMPROVED AND NEW FUNCTIONS IN CNCNET DNC 11.02

GENERAL IMPROVEMENTS

CNCnet DNC 11.02 was developed in a 64Bit environment and is suitable for all x86 (32 Bit) and x64 (64 Bit) versions of Windows XP, Windows Vista, Windows Server 2003, Windows Server 2008 und Windows 7. CNCnet DNC 11.02 does not depend on external software components or .NET additions and does not store any information in the registry of your computer. Per installed instance CNCnet DNC 11.02 can operate up to 100 connected machines. Of course you can install and run multiple instances of the program.

IMPROVED AND NEW FUNCTIONS

FAILSAFE OPERATION MODE

You can operate CNCnet DNC 11.02 in a failsafe operation mode by copying the whole application directory into a new folder and start the program a second time. In case of an error in the primary program you can immediately continue working with the second program by switching on the specific port. This is also the preferred method for integration and test of new machines as it allows the main program to continue to work without the need for a restart.

INTEGRATES WITH YOUR FAVORITE NC-EDITOR

You can seamlessly integrate your favorite NC-Editor with CNCnet DNC 11.02 by setting this Editor in CNCnet DNC as your preferred program for all NC File modifications. CNCnet DNC 11.02 then automatically calls your NC Editor every time you perform a NC File modification. Here's an example of using the cost free file editor notepad++ for comparing multiple NC-Files:
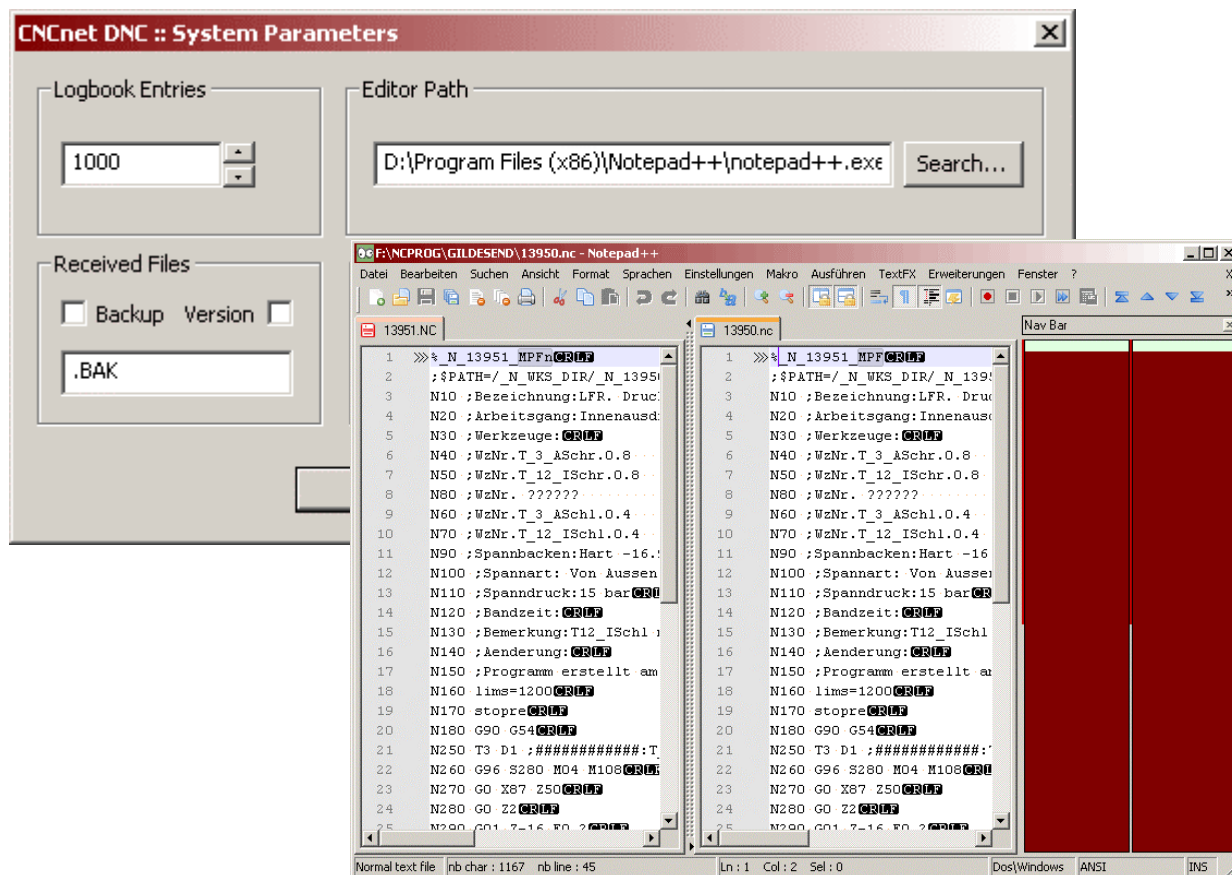
MORE INFORMATION IN THE MAIN MENU

The information field on the bottom of the main menu shows the protocol, the transmission speed, data bits, parity, stop bits and the COM port number of the currently selected port. The picture left of the machine name shows the selected protocol or the selected handshake of the port (black = hardware, red = software). If you move the mouse pointer over the button you can see further important settings of the selected machine.
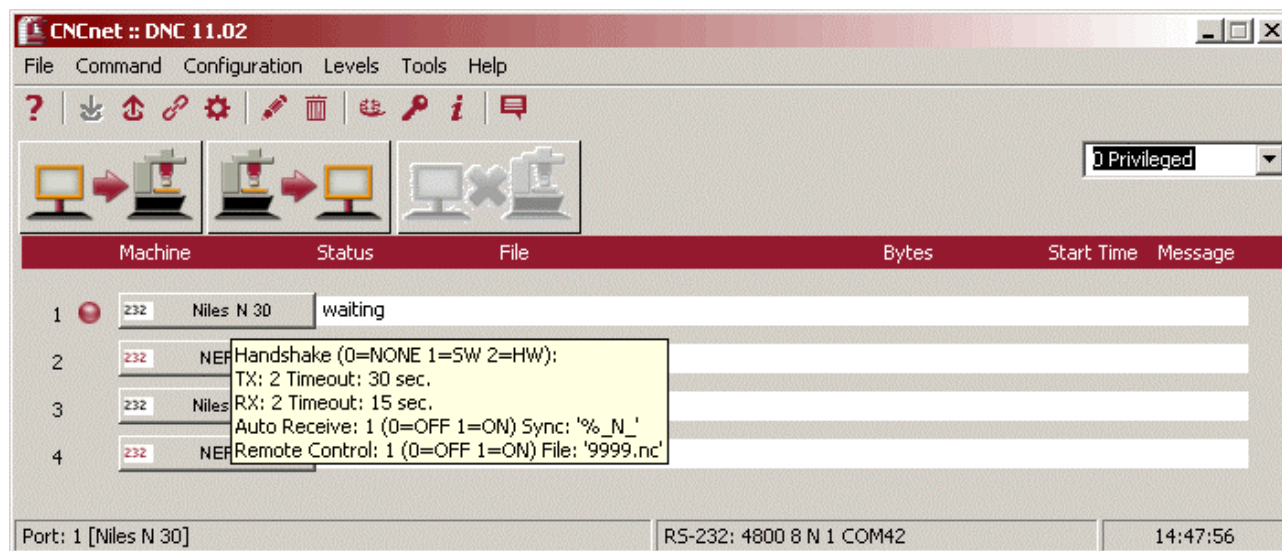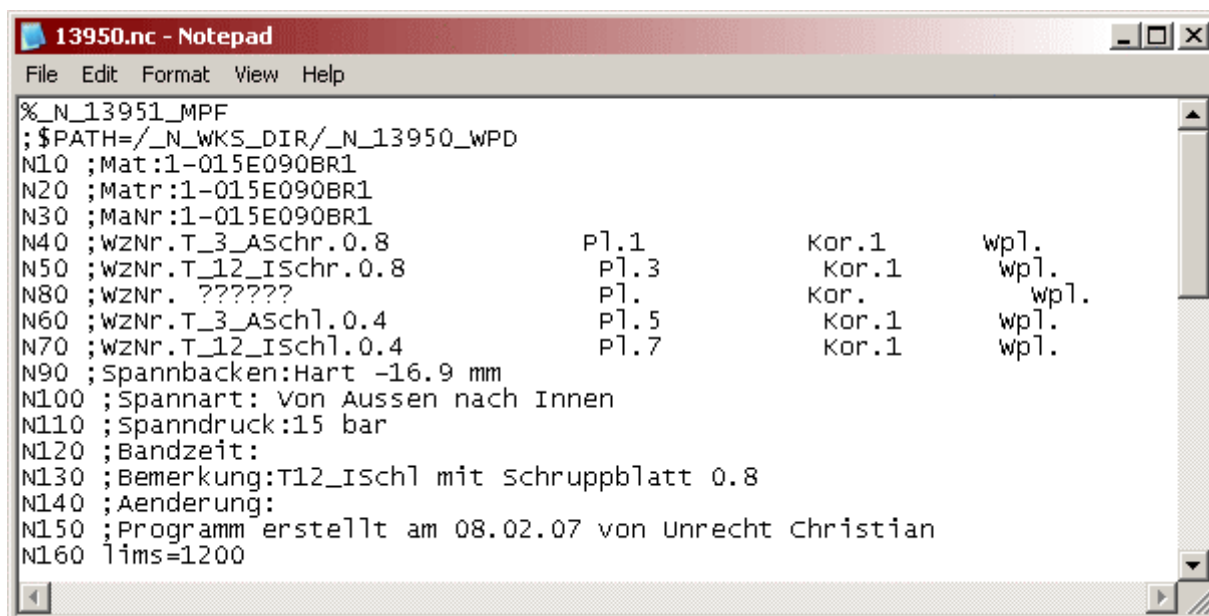

FIND ERRORS QUICKLY

During transmission of an NC-File CNCnet DNC 11.02 immediately shows you where you have to look for a potential error. The CTS Message at Port 1 indicates that the cable between the machine and the serial interface is disconnected or broken whereas the "disconnected" message at Port 2 indicates a problem with the serial interface (cannot be opened).
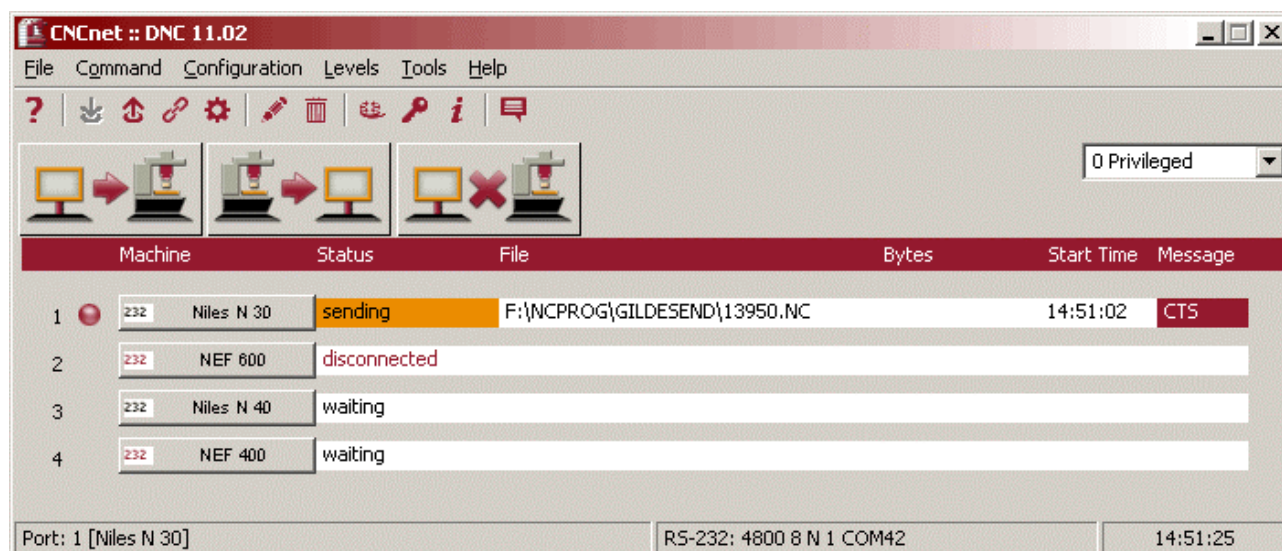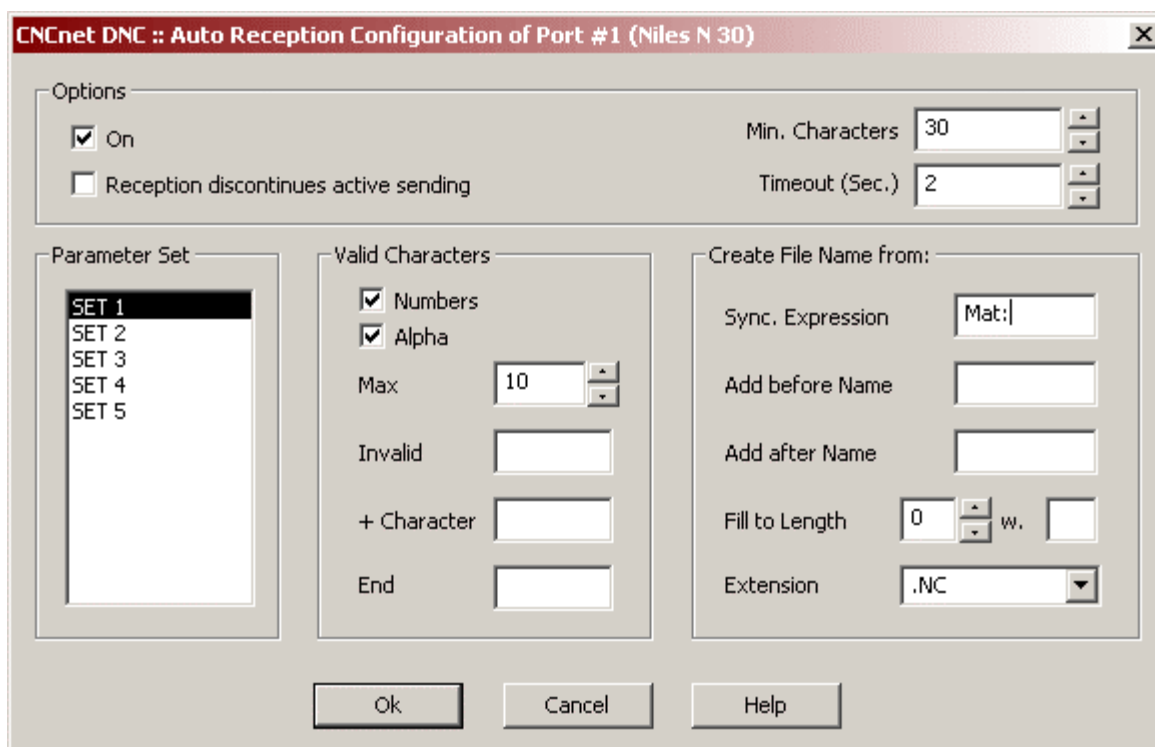
MULTI-LEVEL AUTO RECEPTION MODE

CNCnet DNC 11.02 allows you to build NC-File names from up to 5 different synchronization strings in incoming content. For example: You'd like to store your NC Files by the material number instead of the NC-File number. Unfortunately the operators do not always enter the material number or enter the synchronization string in variants. The machine operators write MaNr, Matr, Mat or nothing.

In the Auto Reception dialog you can now enter up to 5 variants (Sets) for creation of the name. You set the synchronization expression for Set 1 to Mat:, the one for Set 2 to MaNr. a.s.o. In Set 5 you enter %_N_ to allow storage of NC-Files that do not contain a material number.
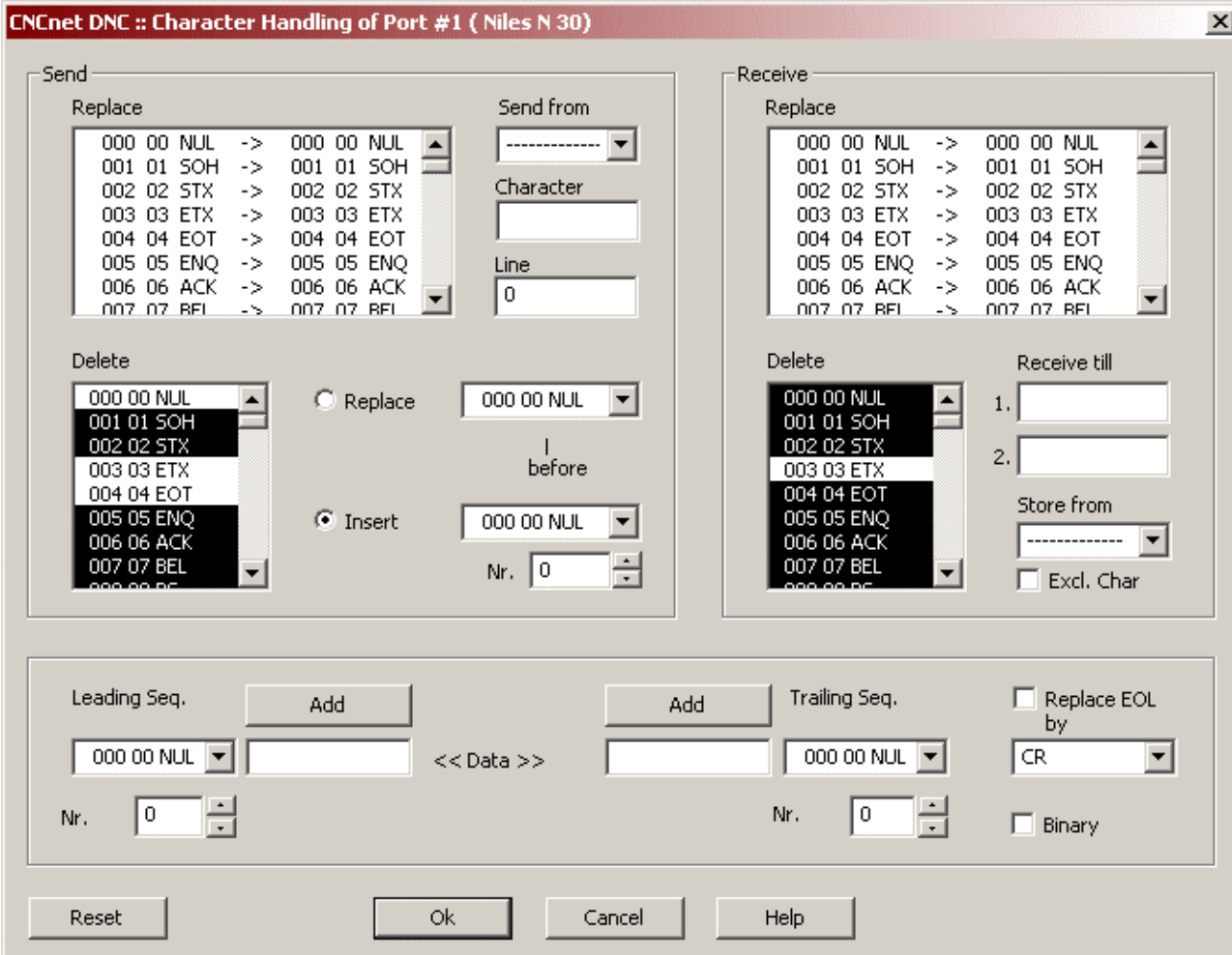
IMPROVED TIMEOUT HANDLING

Timeout handling was readjusted. If you set Timeout Send(TX) After Start to 0 the program waits 200 seconds for a reply from the machine, after 200 seconds it terminates the transmission. You only have to enter a value here if you like to wait more or less than 200 seconds.

OVERLAPPING SEND/RECEIVE

You can now instruct CNCnet DNC 11.02 to receive or send a NC-File while another operation is active. As soon as the first operation is finished, the second starts.

EXTENDED CHARACTER HANDLING

CNCnet DNC 11.02 allows you to send from a defined character or from a defined string. This is useful if, for example, your CAM system adds long comments to the NC File that are not needed by the controller. (e.g. Trumpf CAM System). You can also send your NC-File from a defined line number. It is now possible to exchange a defined character by a number of another defined character. You can receive an NC-File till a defined string comes in or store the NC-File content after reception of a defined character.

FEEDBACK MESSAGES FOR EVERY MACHINE

CNCnet DNC 11.02 now has the ability to add a suitable feedback file for every connected control which informs the machine operator about faulty input or available NC-Files. An example for a Sinumerik 840 controller Sin840.mt (Messages for example „NC File not found ") and Sin840.dt (Content of the machines directory at the network computer formatted as NC file for the controller) is already included. For additional feedback files you just have to copy and modify these examples in a way that allows the controller to understand the content.
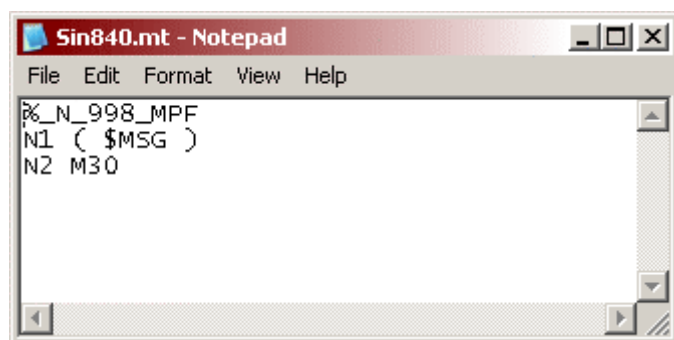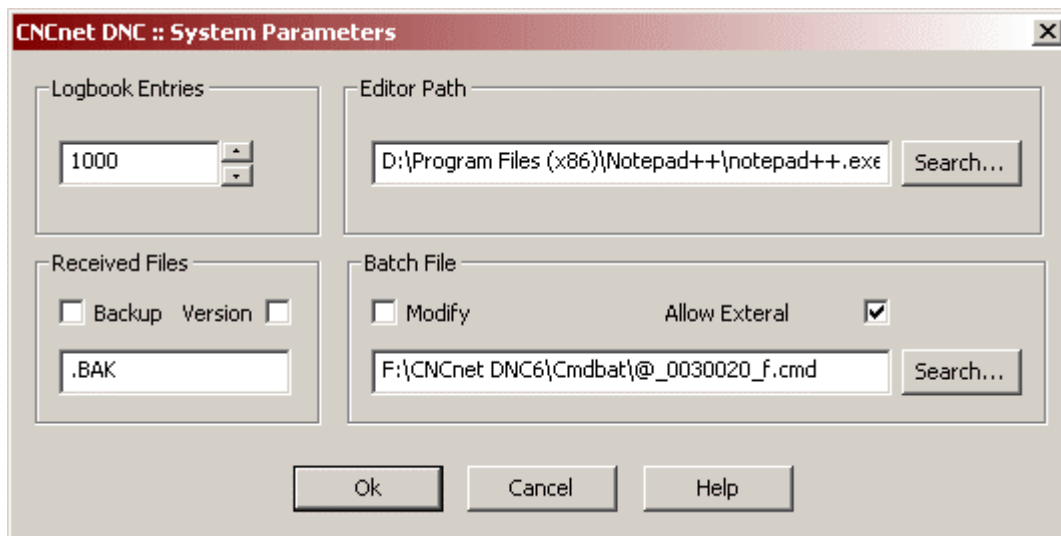

VERSION CONTROL FOR RECEIVED NC-FILES

In addition to the function of making a backup copy of an existing file when a new file with the same name is received CNCnet DNC 11.02 now has the ability to make a copy of every incoming version of the NC-File. You can activate the function in Configuration->System->Settings->Received Files->Version. When an NC-File is received a new copy of the existing NC-file with a numeric version extension is added to the directory. For example from 13951-0.NC to 13951-2.NC:
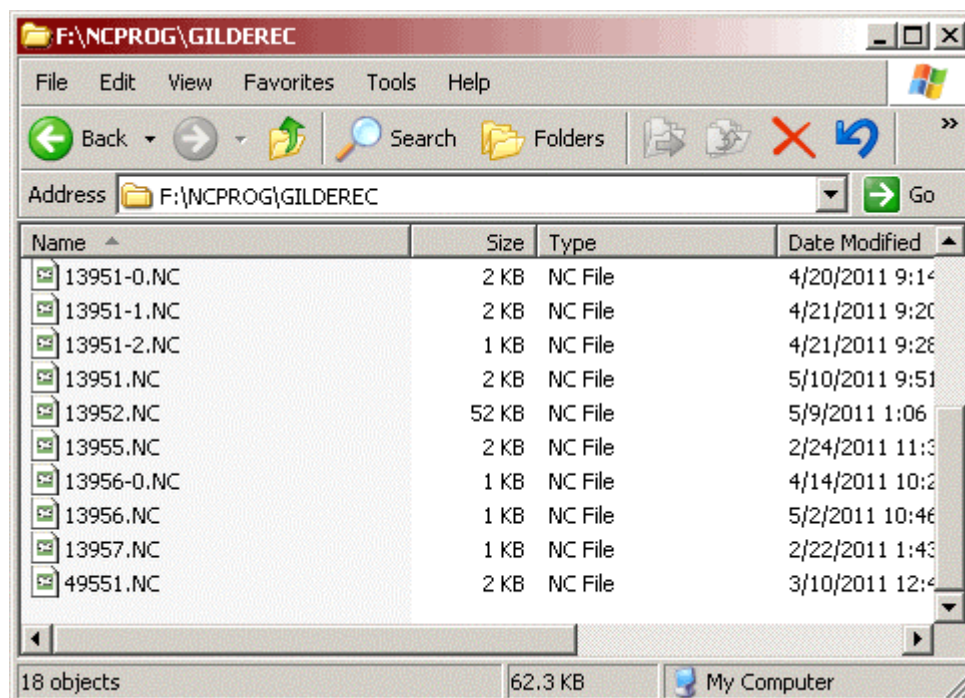
REMOTE CONTROL OF CNCNET

If you activate the function Configuration->System->Settings->Allow External CNCnet DNC 11.02 now also can be operated by an external MES or ERP program. The MES or ERP program can then write the defined file (e.g. @_0030020_f.cmd) which causes CNCnet DNC 11.02 to perform the contained actions (e.g. 0001DS:SENDDATA:1234.TXTFILES = Send NC File 1234.txt to machine on Port1)
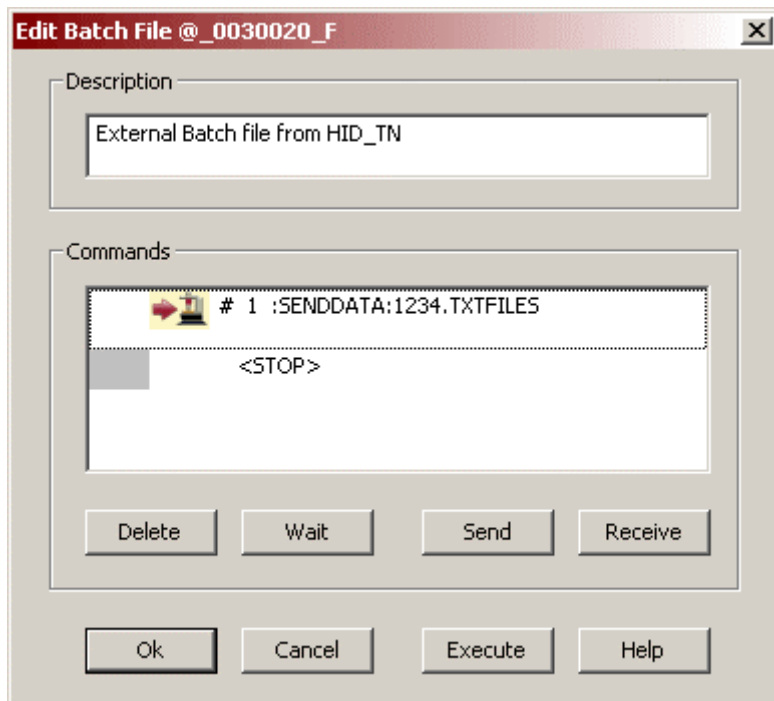
All possible commands can be edited and immediately tested by the function Command->Command Queue->Edit batch file.

MONITORING OF COM INTERFACE STATES
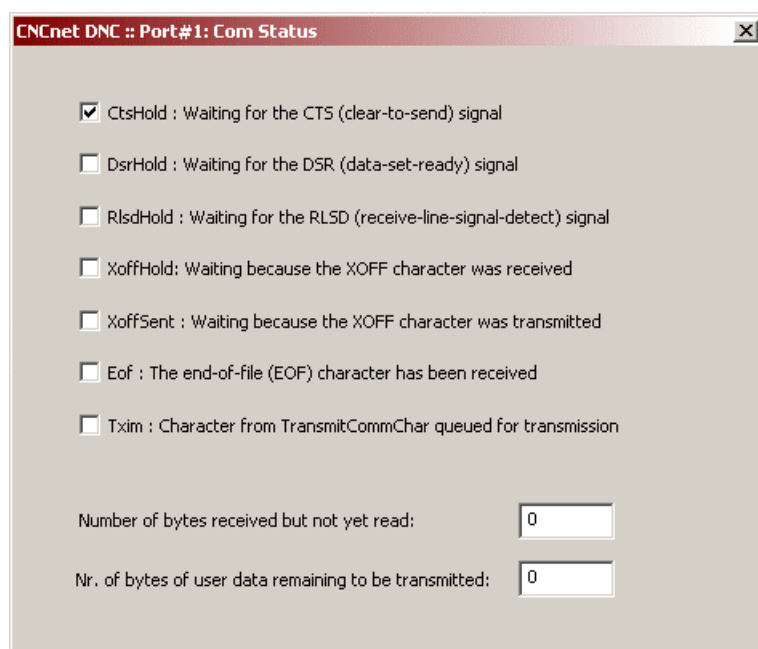
By using the COM Port Status which can be found in Tools->COM Port Status you can easily monitor all states of the selected serial port for example are the handshake signals up or down or is any content in the transmission or reception buffer. In the example shown the cable to the controller is not plugged in (CTSHold).

PORT PARAMETER DOCUMENTATION

CNCnet DNC 11.02 now has a function that allows you to backup and display all settings and parameters for a specific machine. You find the function under Configuration->Port->Options->List Port Parameters.
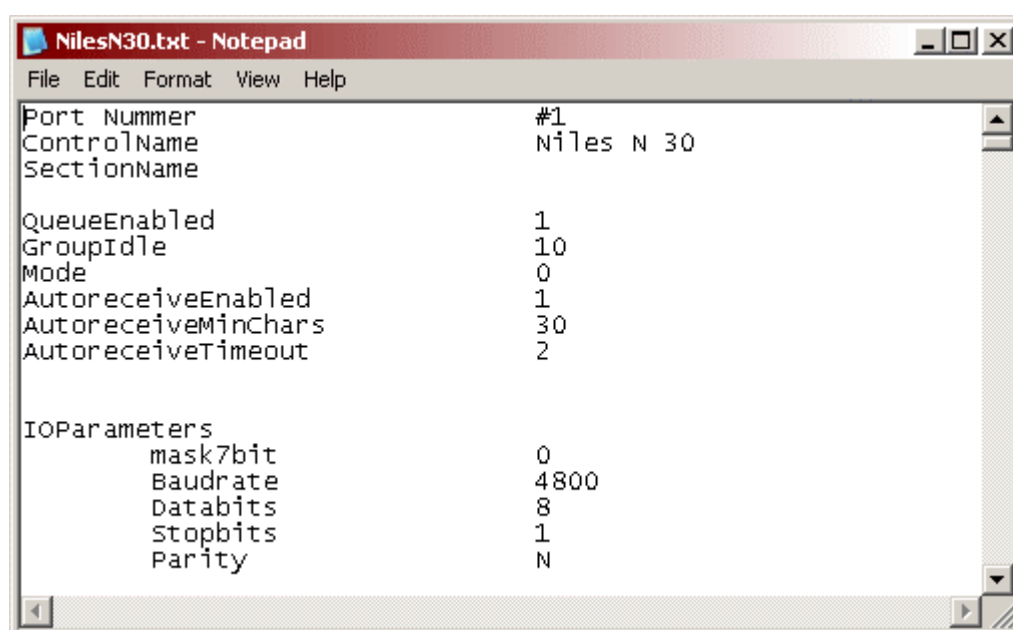
LOGGING OF RECEIVED NC-FILES

CNCnet DNC 11.02 now has a logging function that shows all received NC-Files. You find the function under File->Received Files. The files can be selected per machine and be edited directly from the dialog window:
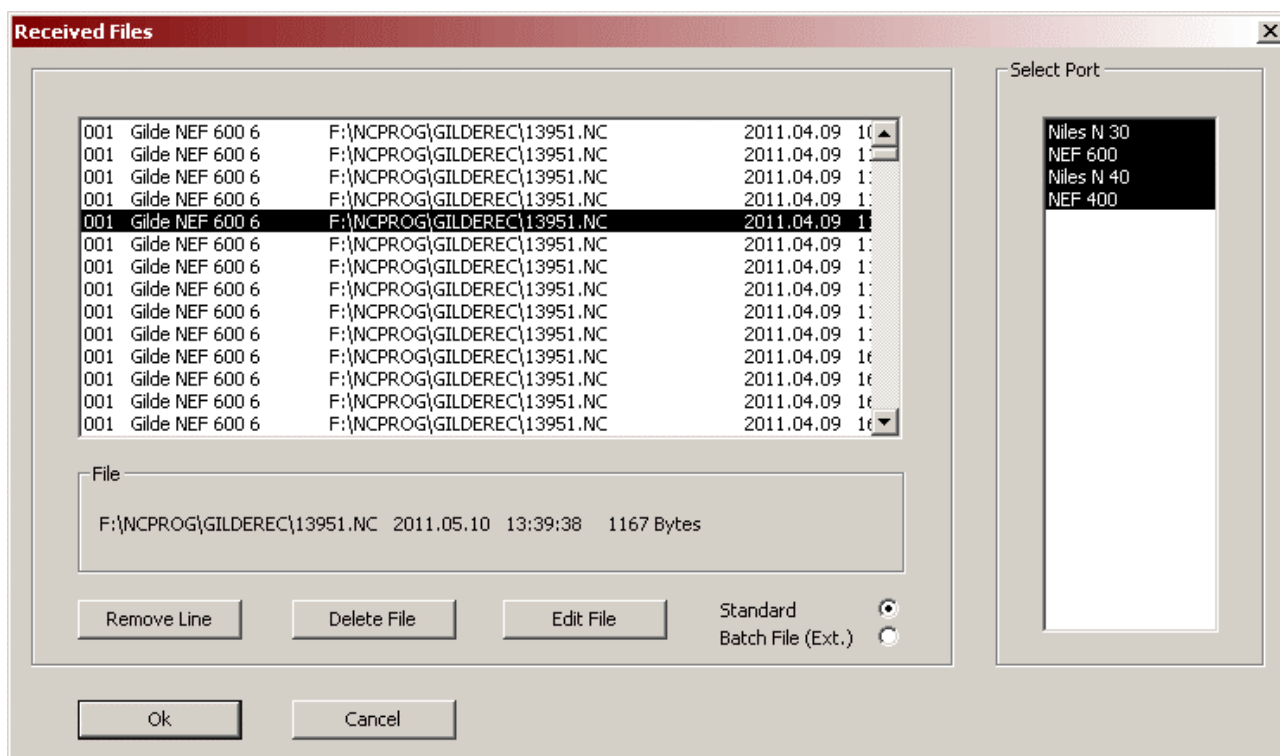
COMPARE NC-FILES

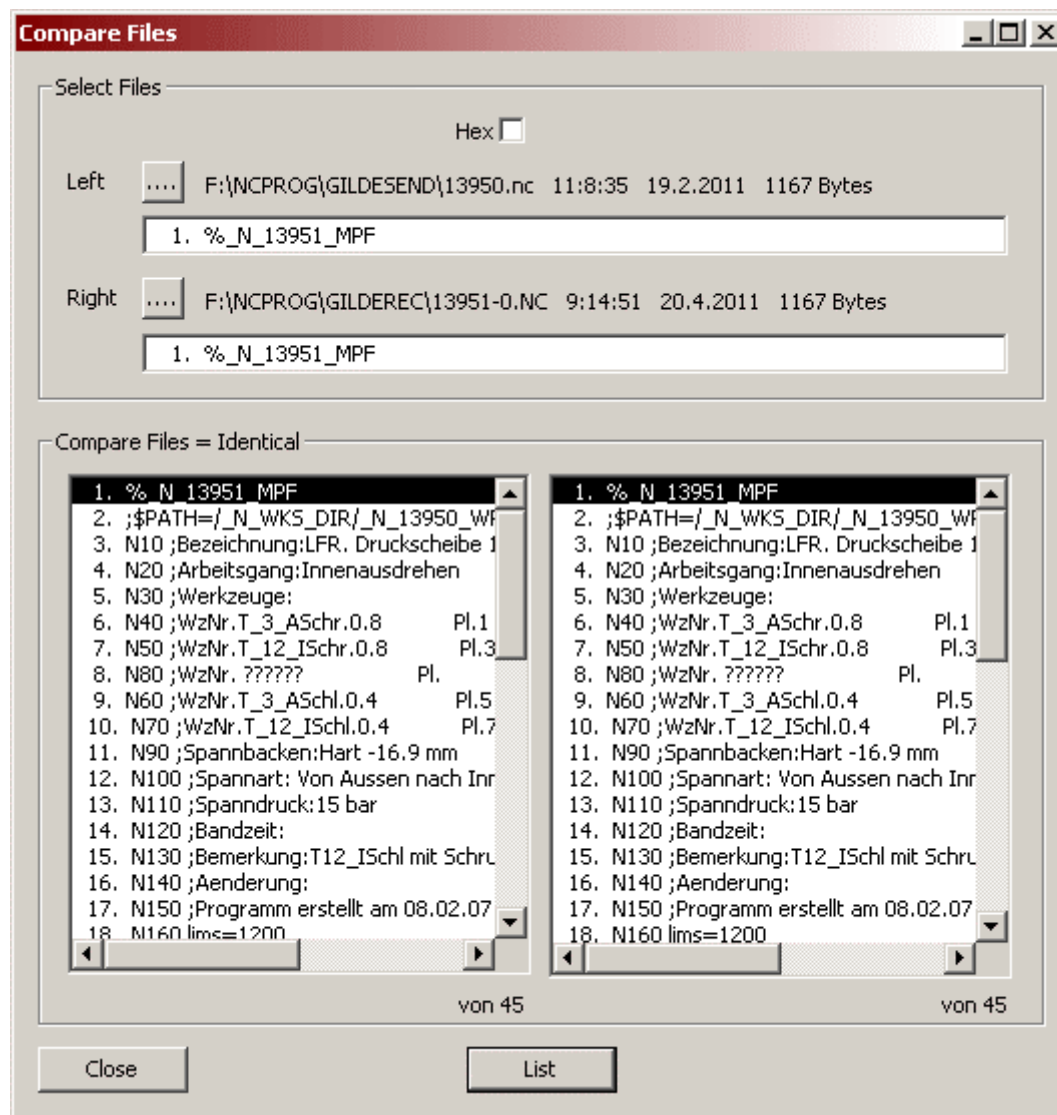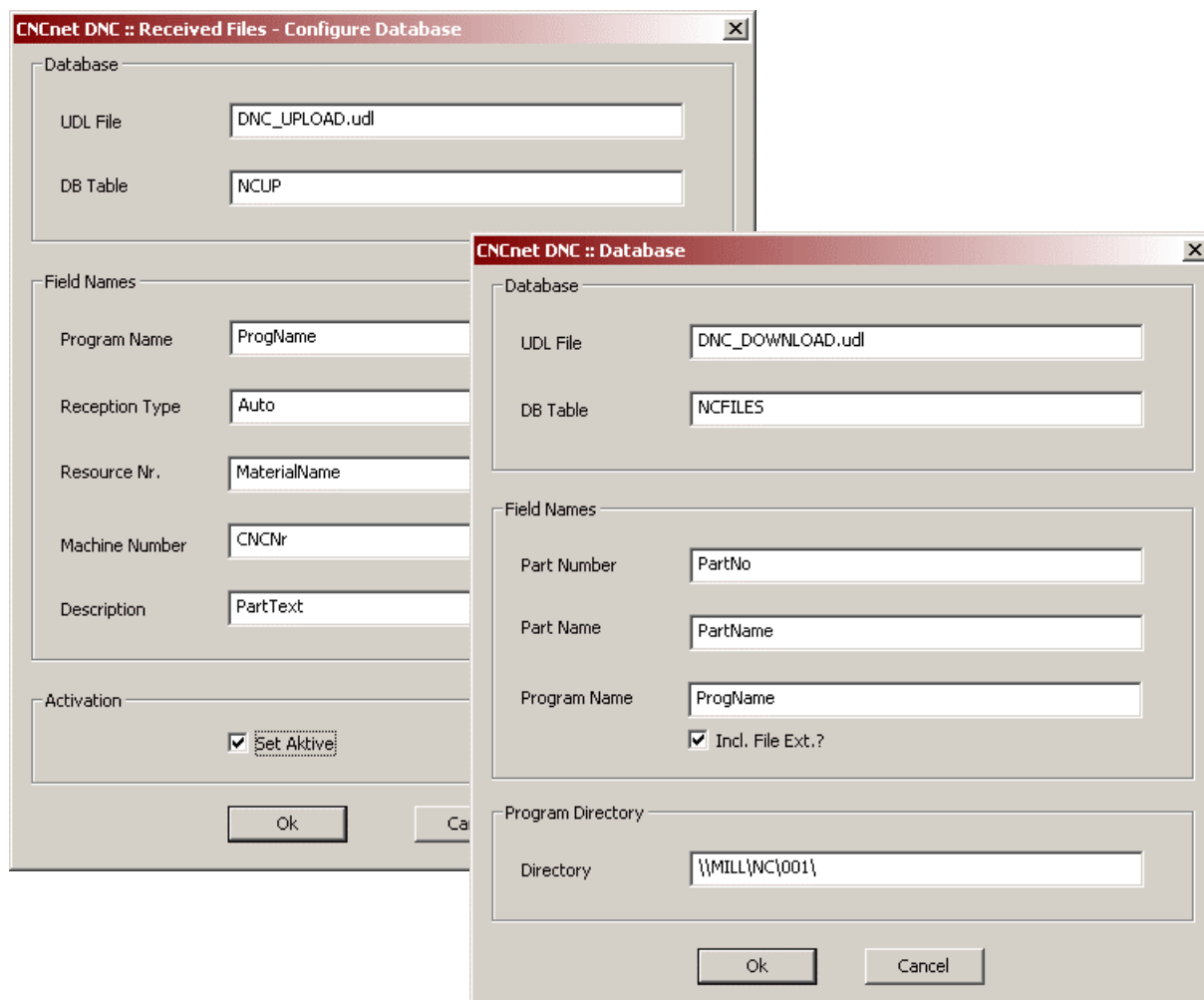Under File->Compare Files you can find a handy function that allows quick comparison of two files if needed also in hexadecimal form.

EXTENSIVE DATABASE-INTEGRATION

CNCnet DNC 11.02 allows you direct integration of your controllers with your MES or ERP solution. CNCnet DNC 11.02 provides connectivity from simple text based databases (Index Database) up to all databases that can be accessed by an UDL (Universal Data Link) file like MS Access, SQL Server, Oracle, MySQL and SAP's MaxDB. CNCnet DNC 11.02 allows to store information about received NC-Files in your database as well as retrieval of NC-Files from a database. Retrieval can be done by a set of configurable fields like program name, material name or part name. The NC-Files themselves remain in the typical directory structure.

CNCnet DNC :: Received Files - Configure Database

Database

UDL File: DNC_UPLOAD.udl

DB Table: NCUP

Field Names

Program Name: ProgName

Reception Type: Auto

Resource Nr.: MaterialName

Machine Number: CNCNr

Description: PartText

Activation

☑ Set Aktive

Ok   Ca

CNCnet DNC :: Database

Database

UDL File: DNC_DOWNLOAD.udl

DB Table: NCFILES

Field Names

Part Number: PartNo

Part Name: PartName

Program Name: ProgName

☑ Incl. File Ext.?

Program Directory

Directory: \\MILL\NC\001\

Ok   Cancel