

## Enhancements and Bug Fixes

### 1.06

#### New Features & Enhancements

- Add support for multithreading on NT; systematic removal of global variables impacts many modules
- Replace the NT and UNIX kernel modules
- Add TRACE\_SAVE feature
- Add dispatcher for NT
- Add KERNEL\_EXIT feature to break out of nwds\_sleep
- Extend threads and dispatcher to UNIX
- Change IBM provider to Alicomp
- Add Xygate encryption
- Remove all signal processing from the UNIX kernel
- Add KEEPALIVE to TCP/IP for VMS

#### Significant Bug Fixes

- Correct problems and memory leaks caused by repeated making and breaking of TCP/IP connections
- Correct a problem with FIFOs on 64-bit UNIX systems
- Correct problems with recovery in RFT2
- Correct processing of TP calls on Tandem
- Correct processing of EWOULDBLOCK in TCP/IP on UNIX
- Detect and process EINTR on UNIX
- Remove memory leaks caused by repeated use of nwds\_init and nwds\_exit
- Negotiate buffer sizes at levels 2 and 3
- Detect USESEGMENT error in Tandem NonStopSQL
- Process close after all other socket messages in NT Winsock2

### 1.07

#### New Features & Enhancements

- IPC and FIFO functions for Microsoft COM+ environment
- Encryption, authentication and key management; cf. Config, section 8
- Dual-rail routing; cf. Config, section 3.5
- Pooling and capping of connections; cf. Config, section 3.2.2
- Revised error logging; cf. Config, section 5.1.
- Application logging via nwds\_msglog; cf. API, section 2.40.

#### Significant Bug Fixes

- Reject API calls for IPC and FIFO if NetWeave is uninitialized

### 2.0

#### New Features & Enhancements

- Dynamic INI Files; cf. Config, section 5.9
- Management of INI files; cf. Config, section 5.10
- Load Balancing; cf. Config, section 5.11
- Platform-Specific Logging; cf. Config, section 6.3
- Extend message logging to IBM/CICS; cf. IBM Release Notes
- Extend synchronous API calls to C programs on IBM/CICS; cf. IBM Release Notes
- Extend support on DEC VAX to OS release 7.1
- Enhance TCP/IP to specify the IP address on connect (CLIENT\_TCPIP\_ADDRESS and PORT)
- Add timeout for asynchronous connections (CONNECT\_TIMEOUT) in LEVEL3
- Enhance load-balancing to retry failed connections

Extend support for TCP\_NODELAY to all platforms except IBM/CICS  
Add support for the Euro currency character  
Support different ebcdic codes for brackets  
Support for native mode COBOL on Tandem  
Improve perfpong for more accurate measures and reporting of performance  
Implement CLIENT\_TCP\_ADDRESS and PORT for Tandem  
Add new function nwds\_tp\_start\_by\_handle.

### **Significant Bug Fixes**

Reject all other API calls if NetWeave is uninitialized  
Fix shutdown race condition on IBM for nwds\_ipc\_accept  
Fix overrun (EWOULDBLOCK) on UNIX TCP/IP  
Plug memory leaks in 5 modules  
Correct the value of the message size in nwds\_ipc\_options  
Correct several problems with legacy file operations on Tandem D30 series  
Correct the process ID in Dual Rail on IBM/CICS  
Fix a problem in nwds\_ini\_get\_name with dynamic INI files  
Fix kernel loop and kernel exit to exit in all cases  
Detect and discard messages from disconnected sessions  
Plug memory leaks in 9 modules  
Fix several printing problems in tracing and message log feature  
Fix a problem in TCP/IP on NT related to SP6.  
Fix a problem in the Agent to prevent crashing when trying to connect to a downed server  
Fix a problem in tracing on threaded platforms to prevent programs from hanging  
Fix a memory leak in shutdown for the DOLLAR\_RECV protocol  
Catch SIG\_PIPE signal in the UNIX kernel  
Fix a problem where TCP/IP NODELAY parameter was ignored by Tandem server code.  
Fix several problems in the DOLLAR\_RECV protocol. (Tandem)

## **2.0, version 7**

### **New Features & Enhancements**

Add support for Solaris 64 bit OS.  
Add support for HP-UX 11 64 bit OS.  
Add support for vproc for NetWeave executables on Tandem Guardian.  
Add support for nwds\_execute and nwds\_stop calls for Windows NT and Windows 2000. New netweave.h parameters NWDS\_WIN32\_COMMAND\_ARGS and NWDS\_WIN32\_RETURN\_PID support the execute call in the same manner as on UNIX platforms. Windows version of test program tst supports the new execute command.  
Add new TRACE\_APPEND parameter to TRACES group in the ini file. The default is for trace files to be overwritten. When set to 1 data is appended to the existing trace file.

Created a NetWeave interface for Powerbuilder. Developed examples of Powerbuilder to making Netweave calls.

### **Significant Bug Fixes**

Fix a memory leak in threaded UNIX versions.  
Fix a memory leak where handles in the agent were not cleaned up.  
Fix a problem on UNIX where the nwds\_execute call was improperly handling the SIGCHLD signal causing the creation of zombie processes.  
Fix nwds\_batch command for Windows to wait for process to complete.  
Fix both batch and execute commands across all platforms NOT to run the command locally if the remote system is invalid or unreachable.  
Fix linked-list logic to omit display of queue growth when QUEUE\_MODULE = 0 in the group [NWDS\_QUEUE\_CONTROL]. This is the intended default.

Fix a memory leak in the PATHSEND protocol that affects programs that call `nwds_ipc_connect` and `nwds_ipc_shutdown`. The NetWeave Agent is the most important example of such a program. All customers who use an Agent to access Pathway server classes from remote clients should update their Agent with this version. Any customer with an application similar to an Agent and that uses the PATHSEND should rebuild the application.

Fix the error reporting on Tandem of Guardian problems that occur when reading FIFOs.

The Tandem native executables, e.g., `basesvr`, are now linked using the maximum amount of potential heap space available to an application. The maximum amount of memory varies with your Guardian version. The memory is only allocated if needed.

Port numbers in the range 32000 – 64000 are available now for WinNT, UNIX, and Tandem.

Fix library and Agent to accept connections from very old versions (1.5.2 thru 1.5.6) of NetWeave.

Fix `nwds_tp_*` functions on Tandem to return from unusual TMF errors.

## **2.0, version 14**

### **New Features & Enhancements**

Add the password “vault” to encrypt and store username and password. This enhancement is available only in the RFT2 product.

Add license protection for servers.

### **Significant Bug Fixes**

Fix conflict on Tandem between timing of heartbeats and timeouts for reconnections.

Fix broadcasts on Tandem to receive broadcasts of at least 8K bytes.

## **2.01 Version 1 (October 2007)**

### **New Features & Enhancements**

EJB Compliant (V1 and V2) implementation with local daemon

.Net Compliant implementation

Tandem Itanium build and release

SSL encryption layer : encrypted “vault” capability extended to include keys for SSL usage.

Ports to HP Integrity (Itanium) HP-UX, OpenVMS and Linux

Port to Windows IA-64 platform

### **Significant Bug Fixes**

Secure local port on EJBv1 implementation to limit connections to localhost

Addressed memory leak in Tandem agent under obscure circumstances with Pathway

## **2.01 Version 2 (March 2008)**

### **New Features & Enhancements**

SSL encryption layer : support for chain of certificates of authority

## **2.01 Version 3 (December 2008)**

### **Significant Bug Fixes**

Repaired a buffer overrun for UNIX platforms

**2.01 Version 4** (November 2011)

**New Features & Enhancements**

Linux 64 bit support

Ipv6 support for linux

**Significant Bug Fixes**

Load balancing fix – load balancing feature was always using first connection group

Windows fix for writing log to a temporary file

**2.01 Version 5** (May 2012)

**New Features & Enhancements**

Solaris 10 64 bit & ipv6 support

Windows ipv6 support

**2.01 Version 6** (November 2011)

**New Features & Enhancements**

HP NonStop ipv6 support

**2.01 Version 7** (September 2015)

**New Features & Enhancements**

AIX 64 bit & ipv6 support

SSL TLS 1.2 support