RETool Type 2 Workstation-Based Team Provider

ECLIPSE / PrimeCode Integration

Product Overview

RETool by Nexbridge substantially improves developer productivity by integrating PrimeCode into ECLIPSE. Until now, developers had to use either external interfaces or FTP files to a NonStop server and then interact with PrimeCode. With RETool, developers can use PrimeCode directly from their ECLIPSE workbench through simple pop-up menus.

The RETool Type 2 provider supports normal developer functions, including commit, update, synchronize, and history. Type 2 can act completely standalone and does not require another Team provider.

Key Features and Benefits

- Industry standard integrated development environment (IDE)
- One interface point substantially improves developer productivity
- Simple code deployment and infrastructure using ECLIPSE framework
- Multiple PrimeCode repositories/catalogs
- Platform independent client
- NLS support available

RETool leverages the ECLIPSE Team and Synchronization Workbench Frameworks to provide cost-effective integration with the Emperex PrimeCode product. Developers are just a few mouse clicks away from most interactions with development RMS catalogs.

Like other ECLIPSE plug-ins, RETool updates are deployed using the ECLIPSE Update Manager, making management of RETool itself very simple. On the host, RETool integrates into the SSH to start up individual sessions. RETool uses standard NSK security mechanisms, so PrimeCode does not have to be aware of RETool.

The key benefits of RETool to the developer are simplicity, speed, and general increased acceptance of PrimeCode. Developers who are new to the PrimeCode space will be more comfortable using RETool, since it requires no special NonStop knowledge. In fact, if coupled with the Corona cross compilation plug-in and HP cross compilers, the only time developers will need to interact with the NonStop is to platform-test their code. RETool supports extended RMS component names, so developers will be able to use case-sensitive workstation-like names rather than Guardian names, making Java and C++ development substantially easier.

Key Functionality

The RETool Type 2 project supports the following primary capabilities:

Commit   RETool has the ability to perform complete submit functions on projects, groups, and files. The submit operation supports comments and user change identifiers.

Update   RETool can extract entire projects, groups, and individual files to quickly obtain the correct versions of code from the catalog.

Synchronize   Developers can use RETool to easily perform *up-to-date checks* to determine what has changed in the repository compared with the software in their workspaces. Changes can be added and merged into work-in-progress.

Merge   RETool leverages the Synchronize capability to allow developers to efficiently and **graphically** merge changes between branches and local changes. Developers no longer have to sign-on to TACL to run RMSMERGE.

History   RETool can also provide history information on what has changed in a component, throughout its lifespan.

Produce   Once changes are checked in, developers can initiate produce commands from RETool and capture output on their workstations, without ever leaving ECLIPSE.

Promote   As of 2.0, RETool added promote and demote capabilities to move state markers on component versions.

Add/Delete   With 3.0, Components are automatically added and removed from catalogs to reflect workstation contents during Commit operations.
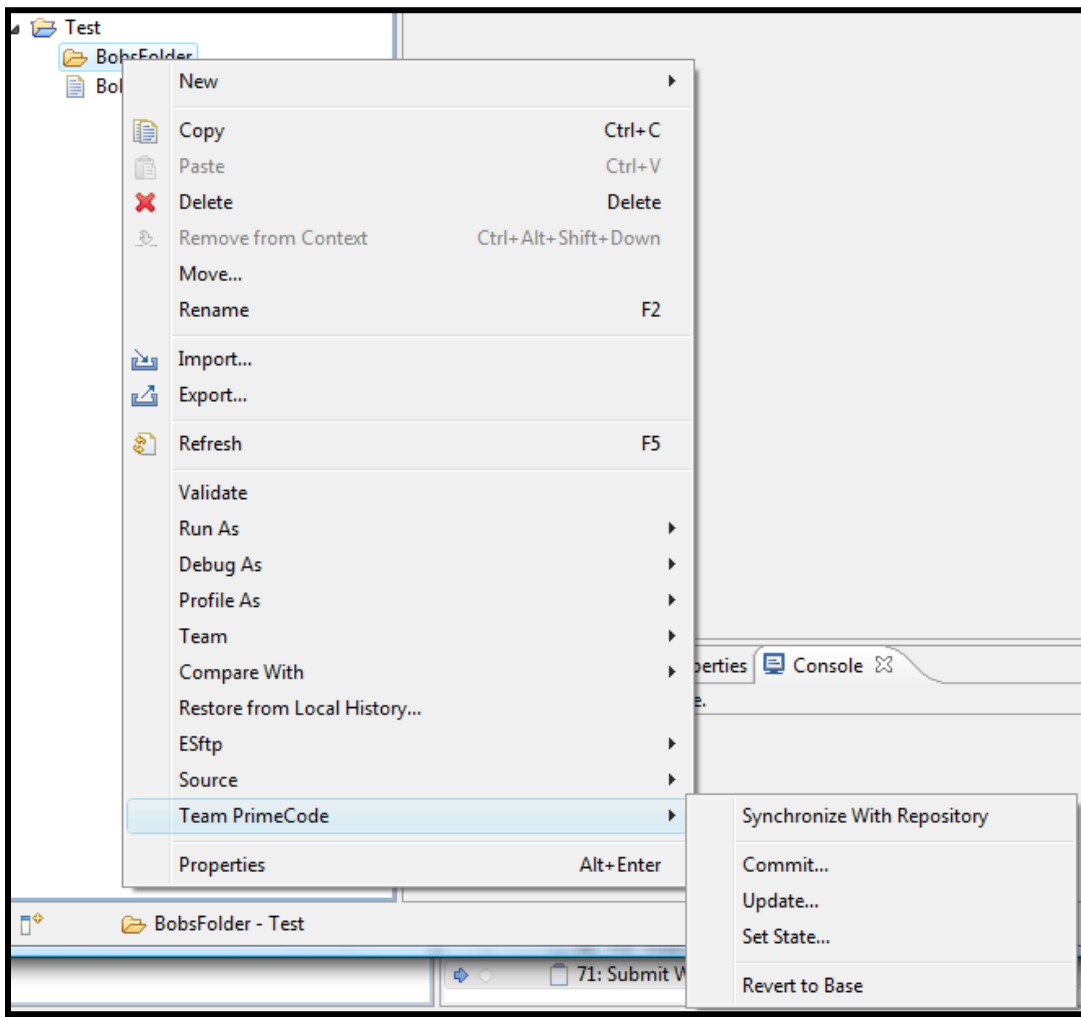
SSH2 Connections are now using SSH software is available on NonStop servers. No information is sent over the wire or wireless without being encrypted, including file transfers.

RETool has other capabilities as well. Make sure you discuss these with your Nexbridge representative.

Integrated ECLIPSE Popup Access

The RETool Type 2 product extends the ECLIPSE workbench to include a special popup menu allowing quick access to the most used PrimeCode functions:

The above screen capture shows a sample of what the RETool Type 2 plug-in looks like to a user. Developers can commit or update entire projects, specific folders, or individual files with just a few clicks, while staying in ECLIPSE.
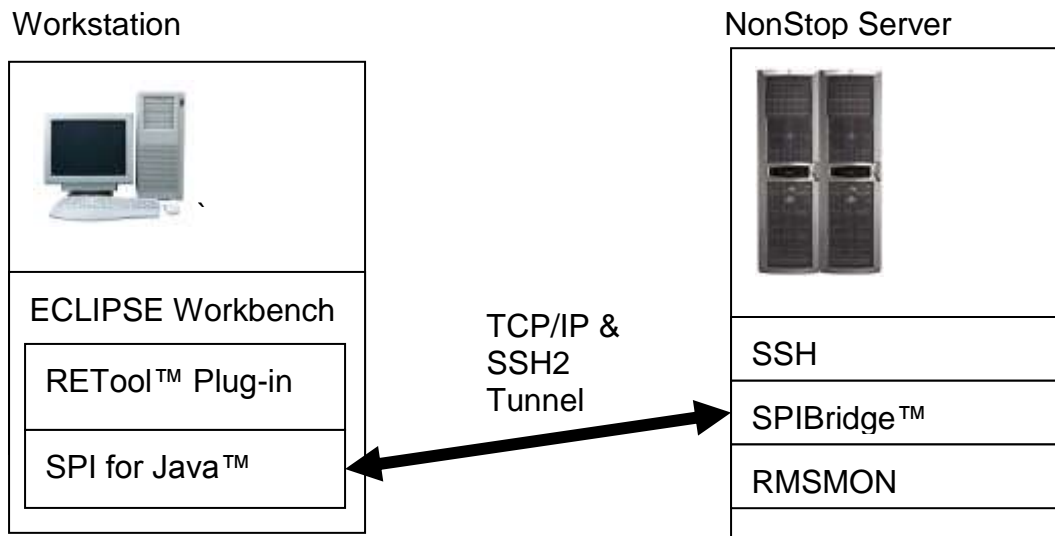
Multiple Repositories

All of the RETool product types support multiple repositories. Individual projects within an ECLIPSE workspace can be associated with a separate RMS catalog. This allows complex workspaces to be constructed, potentially with projects hosted on different NonStop servers or even with different ECLIPSE Team providers. The RETool Type 2 product even allows one team provider to host the project, while supporting commit and update functions to a different RMS catalog. For example, developers could do their day-to-day work in Git, Mercurial, Subversion, or CVS, and commit code to PrimeCode only when ready for integration testing. RETool Type 2 facilitates this development process.

Multiple PrimeCode Version Support

Because RETool uses the RMS Subsystem Programmatic Interface (SPI), it is actually independent of the version of the RMSMON process running on the NonStop. System managers can upgrade RMSMON without needing to upgrade RETool at the same time. In fact, because RETool can function with different versions of RMSMON, it is highly friendly to a diverse environment, where different groups operate different copies of PrimeCode, but share resources and components.

RETool Architectural Overview

The RETool product has a straightforward architecture that enables it to provide efficient and reliable capabilities:

Workstation   NonStop Server

ECLIPSE Workbench		
RETool™ Plug-in	TCP/IP & SSH2 Tunnel	SSH
SPI for Java™	⟷	SPIBridge™
		RMSMON

Note that SPIBridge™ is a required component. RETool communicates with RMSMON using the SPIBridge™ client and server using SPI for Java™[i].

Technical Benefit Summary

Following are benefits of the RETool integration of ECLIPSE and PrimeCode:

- Industry standard integrated development environment (IDE)

- One interface point substantially improves developer productivity

- Simple code deployment and infrastructure using ECLIPSE framework

- One workbench for development and code management, regardless of the language

- Clients can communicate with multiple PrimeCode Repositories/Catalogs, even within one workspace.

- Projects can be configured with different *states* allowing developers to switch between development and support roles instantly.

- Support for S-series hardware and G operating systems

- Support for Itanium hardware and H operating systems and J operating systems

- Support for any workstation type and operating system supporting ECLIPSE Ganymede.

- Platform independent client plug-in with all Java interfaces, without the need for JNI or native code

Workstation Functional Comparison (Fall 2008)

Capability	RETool Type 2	PrimeCode GUI	PrimeCode CEI	FTP + Telnet + RMSCOM
Integrated with ECLIPSE	**Yes**	No	No	No
Extract single component	Yes	Yes	Yes	Yes
Extract group	**Yes**	No	No	Yes
Extract group recursive	**Yes**	No	No	No
Submit single component	Yes	Yes	Yes	Yes
Submit group	**Yes**	No	No	Yes
Submit group recursive	**Yes**	No	No	No
Requires Pathway	**No**	Yes	No	No
Automatic Add/Remove on Submit	**Yes**	No	No	No
Approvals	No	Yes	No	No
Release Management[1]	No	Yes	No	Yes

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[1] Release management is available via the customized RETrack product set

RETool Type 2 3.0.3

Technical specifications

System Requirements

Hardware	S-Series (G06.27+) or NS-Series (H06.11+) or Blade (J06.11) is recommended for the SpiBridge component.
Software	ECLIPSE Helios 3.6 or higher is recommended on the workstation running a Java 6.0 runtime.
Languages	RETool does not have language restrictions
NLS	English and French versions are available. Other languages can be added on request.

Supported HP Platforms

Hardware	HP NonStop S-Series Server HP NonStop Integrity Server
Software	NonStop Operating System and OSS RVU G06.27 or greater NonStop Operating System and OSS RVU H06.11 or greater NonStop Operating System and OSS RVU J06.11 or greater SSH2 (SPR AAM) NonStop SSH (SPR AAM or higher) is required for communications.
Workstations	Windows 2000, XP, Vista, Vista 64, Windows 7, 8 Mac OS Linux, Solaris
ECLIPSE IDE	3.7.x + (Indigo) with CDT 8.x is recommended

Ordering information

Please contact your Nexbridge sales representative or sales@nexbridge.com to find out more about the RETool by Nexbridge product. Corporate licenses and volume discounts are available. Annual license fees per seat and per host apply. All information is subject to change.

Please visit http://www.nexbridge.com/Products for more information.

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