Remote Support NG

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Remote Support

• Used to provide remote services throughout PTP
• Abstraction of remote concepts
  – IRemoteConnection
  – IRemoteResource
  – IRemoteProcess
  – IListStore
• Allows different service providers to be used
  – Important to allow other remote functionality to be used seamlessly with PTP
• Is not being used by other projects because of “fear of dependencies”
• Is hindering remote enablement of Linux Tools which would benefit PTP
Remote Architecture NG

- PTP
- Linux Tools
- CDT

Remote API

- Adapter
- RSE
- Adapter
- Remote Tools
- Adapter
- JSch
Current Plugins

• Remote API
  – org.eclipse.ptp.remote.core
  – org.eclipse.ptp.remote.ui

• Adapters
  – RSE
    • org.eclipse.ptp.remote.rse.core
    • org.eclipse.ptp.remote.rse.ui
  – Remote Tools
    • org.eclipse.ptp.remote.remotetools.core
    • org.eclipse.ptp.remote.remotetools.ui

• Remote Implementations
  – org.eclipse.rse.*
  – org.eclipse.ptp.remotetools.*
Plugins NG

• Remote API
  – org.eclipse.remote.core
  – org.eclipse.remote.ui

• Adapters
  – org.eclipse.ptp.remote.*
  – org.eclipse.remote.jsch.*

• Remote Implementations
  – com.jcraft.jsch
  – org.eclipse.rse.*
  – org.eclipse.ptp.remotetools.*
“Tweaks” to the API

• `IRemoteConnectionWorkingCopy`
  – All `set*` methods
  – `save()` method
• `IRemoteConnectionManager#newConnection()` returns `IRemoteConnectionWorkingCopy`
• `IRemoteServices#getFileManager()` and `getProcessBuilder()` moved to `IRemoteConnection`
  – `services.getFileManager(connection)` becomes `connection.getFileManager()`
  – `services.getProcessBuilder(connection, options)` becomes
  – `connection.getProcessBuilder(options)`
• `IRemoteServices#getCapabilities()` provides user with information on what is supported by implementation
  – Connection creation/editing
  – Port forwarding
  – X11 forwarding
New/Updated UI

• Remote connections preference page
  – Shows all connections from all providers in one place
  – Allow connections to be created/modified/removed
  – Will allow connections to be opened/closed
  – Will show connection status

• IRemoteUIConnectionManager methods now return IRemoteConnectionWorkingCopy
JSch Provider

• Will be preferred provider
• Requires one sftp channel and one exec channel
• If MaxSessions < 2, will create two separate ssh sessions
  – May require two logins
  – Only happens once when the connection is opened
Demo
Next Steps

• Finish implementation
  – Few UI features still need to be finished
  – Existing adapters need to be ported
• Commit to master branch
• Testing
  – Particularly MaxSessions < 2
• Create new git repo for org.eclipse.remote.*
• Promote to other projects
  – Particularly Linux Tools
  – Platform adoption