

# **Tips for using synchronized projects and how to avoid common pitfalls**

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PTP User Workshop**

# What is PTP Sync?

- Solution to using an IDE on a remote machine
- Goals: Seamless, Fast
- Based on Git
- Two-way sync
- Integrated into CDT Build configurations

# How can I use a remote workspace over SSH?

- **Run Eclipse on the remote machine**  
use it through a VNC, RDP, or X
- **Use an OS driver to map the remote FS**
- **Use rsync to sync the remote workspace**
- **Use RSE to transparently edit remote files**
- **Use the RSE EFS Provider**
- **Use Remote file synchronization**

From: [http://wiki.eclipse.org/TM\\_and\\_RSE\\_FAQ#How\\_can\\_I\\_use\\_a\\_remote\\_workspace\\_over\\_SSH.3F](http://wiki.eclipse.org/TM_and_RSE_FAQ#How_can_I_use_a_remote_workspace_over_SSH.3F)

# Why based on Git

- Fast
  - ~8s initial checkout for 1M lines (ssh localhost)
  - <.2s for changes
- Java Implementation available
- Save two way sync
- Currently requires Git in remote path
  - Relative easy to install from source  
configure; make
  - Few dependencies (zlib)
- Does not interfere with CVS/SVN/Git/..

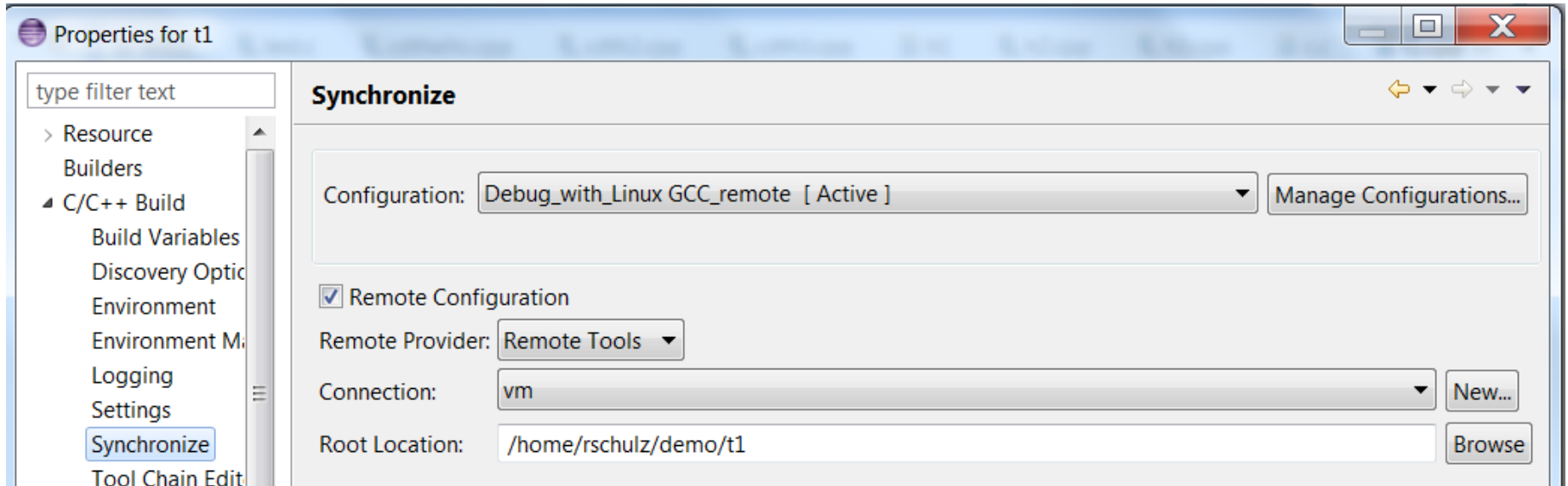
# Build configurations

- Possible to have a local and several remote hosts
- For each host several configurations (e.g. debug/release)
- By default sync is only to active configuration

# Merge conflicts

- Sync automatic merges non-conflicting changes (non adjacent lines)
- Merge conflicts can occur if files are changed outside from Eclipse
- Working with several build host requires
  - Either out of source build
  - Filtering

# Adding new remote host



- Don't create two connections to same host

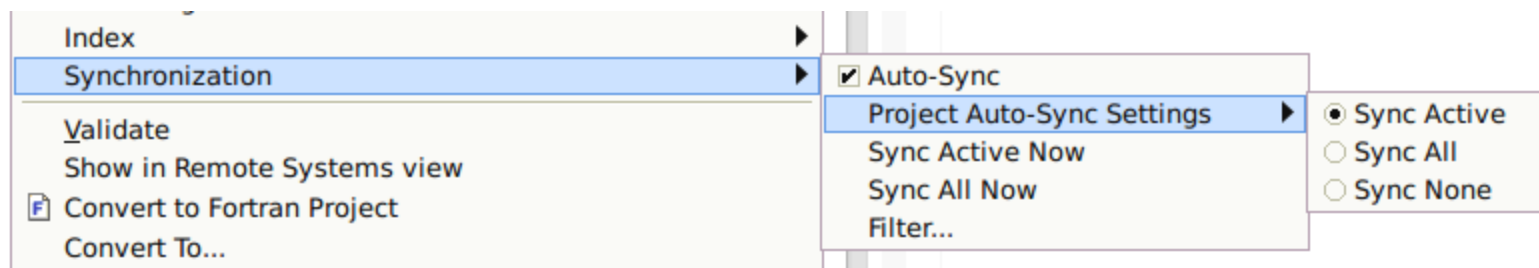
# Filter

- To speed-up and to avoid merge conflicts
- Filter in wizard to make initial sync fast
- Paths are relative to project
- Regex is not Glob. “\*.o” is “\.\$”
- Both path and regex include path and filename
- Exclude large binaries and VCS files



# Sync Settings

- Default: Auto-Sync, Sync Active
- Auto-Sync: Sync on safe
- Sync Active: Sync only active build configuration



# Other tips

- Save before exiting Eclipse
- Sync only active build configuration
- Make sure to sync a configuration before making changes from outside workspace
- If nothing else helps:
  - Delete (all) remote folders (including .ptp-sync)
  - Delete local .ptp-sync
  - Restart Eclipse