

- [Getting Started](#)
  - [Features](#)
  - [Known Limitations](#)
  - [Bugs fixed and minor enhancements](#)
    - [3.0](#)
    - [2.3.2](#)
    - [2.3.1](#)
    - [2.3.0](#)
    - [2.2.1](#)
    - [2.2.0](#)
    - [2.1.1](#)
    - [2.1.0](#)
    - [2.0.0](#)
    - [1.2.0](#)
    - [1.1.2](#)
    - [1.1.1](#)
    - [1.1.0](#)
    - [1.0.2](#)
    - [1.0.1](#)
- 

## Getting Started

Installation instructions and requirements are listed in the [Getting Started](#) online document. Please refer to it in order to know how to install Developer Studio on your system.

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## Features of Developer Studio 3.0

### 1. Packages management

#### *Common features*

- Package Manager perspective, allowing to manage package repositories and installed packages.
- Capability to download and install packages from remote update sites.
- Packages documentation integrated in the Developer Studio help.
- Capability to explore packages resources directory with the system explorer
- Capability to configure the installed packages location.

#### *Open AT Application Framework features*

- Capability to download "package-bundled" applications from Package Manager view
- Capability to upgrade target firmware from Package Manager view

### 2. Development

#### *Common features*

- Project creation wizard:
  - Hardware configuration
  - Target Platform configuration
  - Easy access to samples documentation
- Project import wizard
- Project configuration properties pages
- C/C++ languages support
- C/C++ Source Code Editor
  - Readability: Explicit syntax color coding
  - Views: Project View / Function call hierarchy view / Include file hierarchy view
  - Searching: Index engine and source code navigation
  - Writing: Word completion

### *[New in 3.0]Legato Application Framework features*

- Legato Linux toolchain for standard C/C++ projects management
- Legato Application Framework projects management
- Supports edition for application definition (\*.adef) files, in text mode and through dedicated form editor
- Supports edition for component definition (\*.cdef) files, in text mode
- Supports edition for API definition (\*.api) files, in text mode
- Contextual help on Legato API from source code editor

### *Open AT Application Framework / Mini Core / Multi Core features*

- Project creation wizard: hardware configuration (module/companion chip) or detection from connected module
- Application settings editor (Open AT only):
  - code generation
  - flash mapping configuration
  - file system user attributes labels configuration
  - File System image configuration (for provisioning at download time), including locking capabilities
- Project dependencies management (automated build settings update when adding/removing a project dependency)
- Application tagging facilities and Application Repository management
- Multi Core projects management, to handle Multi Core modules configuration
- Mini Core projects management

## **3. Build**

### *Common features*

- C/C++ compilers support
- Build Reporting: Explicit error and warning message / Direct access to source code linked to errors and warnings
- Batch build capability (invoke a project build from the command line)
- Enhanced build configuration wizard.
- Paths to compilers are configurable (capability to use an external distribution)

### *Open AT Application Framework features*

- Additional build steps support

- Compilation Flags: Managed for full project or file by file
- Compilation Options: Managed for full project or file by file
- Incremental Build
- Support of makefiles generation
- Open AT Libraries packaging facility for distribution to the community:
  - In headless mode, through ant scripts
  - From the UI, thanks to export properties editor
- Application packaging facility for upload to a target device through the AirVantage platform.
- Automatically embeds information on integrated components version (Open AT OS and Plug-ins) in the application binary

*Compilers support:*

***[New in 3.0]***For Legato applications:

- GCC ARM Linux Compliant

*For Open AT applications:*

- GCC ARM EABI 4.7.4
- ARM DS-5 and RVDS (3.1, 4.0, 4.1) Compliant
- Keil MDK Compliant

*For Mini Core applications:*

- GCC ARM EABI 4.7.4
- ARM DS-5 and RVDS (4.1) Compliant
- Keil MDK Compliant

## **4. Target Connectivity**

### **4.1 For Legato devices [New in 3.0]**

Connection management:

- Device connection settings over SSH session
- Supports USB and Ethernet connectivity
- Serial console for troubleshooting (terminal only)

SSH terminal:

- Full-featured SSH terminal, supporting completion, colors, command history, etc...
- Multiple instances terminal on the same device
- Configurable terminal colors and buffer size

File system:

- Full file system access over SCP (browsing, copy, move, deletion)
- Files exchange through drag and drop from/to the Project Explorer
- On-device text files edition support

Application management:

- List of installed Legato applications on the device
- Installation of new applications on the device
- Deletion of applications
- Start/Stop/Restart of applications

#### Legato Framework management:

- Upgrade of running Legato framework instance on the device
- Start/Stop/Restart of the Legato framework

#### Configuration database:

- Browsing of the configuration database tree
- Displaying of current values
- Modification of values

## **4.2 For Open AT devices**

#### Devices View:

- Configurable baud rate autodetection
- Multiple targets connection handling
- Development mode/Production mode configuration
- Project - Connection link
- Multiple log start/stop actions (handling AT/Traces/Info logging on selected ports)
- Raw binary stream record facility
- Virtual ports creation from previously recorded or target retrieved file (e.g. for backtraces or traces offline decoding)
- Capability to hide/show ports
- Visual indicators for RS232 signals + control of DTR output

#### Download:

- Sanity checks before download (alive target, valid DWL file, compatible memory configuration)
- File Type: Application Binary / Firmware binary / Bootloader binary
- File Format: DWL
- Prompt before redownload the same DWL file to the target

#### Info View:

- Target Serial Number / Target Mode / Embedded module Identification / Embedded Software Identification
- Open AT application presence detection
- Embedded binaries data retrieval
- Target memory configuration retrieval
- Target ports states summary
- USB PID (Product Identifier) configuration
- File logging

#### AT Console:

- Dynamic Help for AT commands (link to the related documentation page)  
for Firmware and Plug-ins applications AT commands

- Configurable colouring in development/production mode
- Scroll lock
- File logging
- Timestamping
- Command scripts management

## 5. Debug

### 5.1 For Legato devices [New in 3.0]

#### Logging:

- Log console displaying device log content
- Coloring (WRT. message severity) and filtering of log messages

#### Step by step debugging:

- Embedded GDB

### 5.2 For Open AT devices

#### Trace:

- Traces view font configuration
- Traces characters replacement configuration
- Trace Timestamping
- Development mode enablement saved on the target (*only with Firmware 7.44 and above versions*)
- Scroll lock
- File logging
- Management of trace levels tooltips defined in Application Settings editor
- Traces built-in and user profiles management (with export/import support)
- RAM dump mode support
- Traces view log multiple highlighting/filtering capabilities
- Warning displayed when traces are lost (target buffer overflow) [*Requires Firmware version 7.52 or higher*]

#### Backtraces decoding:

- Backtrace view content saving to file
- Retrieve and decode backtraces stored in the module
- Clear stored backtraces
- Explicit backtrace messages
- Hyperlinks to application source code
- Automated AXF file selection from project link

#### Flash objects:

- Access to flash objects partitions contents (cf. ADL Flash Service API)
- Read/Write/Delete access to flash objects
- Capability to create new flash objects (with raw data, or by uploading a file)
- Capability to upload flash object to files

#### Memory Access:

- Access to application memory (ROM/RAM symbols) without needing to start a debug session
- Symbols filtering and sorting
- Read/Write access to RAM symbols

#### Heap Memory Status:

- Retrieve the list of currently allocated heap memory blocks
- Automated symbols file selection from project link
- Global information about Heap memory size and current usage

#### Tasks Status:

- Retrieve the list of running Open AT tasks
- Displays information about:
  - task status
  - task name (as defined in Application Settings)
  - call stack size/current usage/max usage
- Shortcut to Application Settings editor and code editor when project link is active

#### Memory Mapping:

- Displays information about Open AT application flash and RAM mapping on the connected module
- Allows to configure Flash mapping
- Links to other views
- Tracks free/used space for Application and File System areas

#### File System (requires Firmware version $\geq 7.50$ ):

- Provides an "explorer" allowing to browse the module's File system area
- Recursive upload/download between the module and the host system
- Format/Delete/Copy/Move/Rename/Directory creation facilities
- Files and folders attributes access
- Folder locking capabilities
- DWL file installation

#### Protocol analysis (requires Firmware version $\geq 7.52$ ):

- Actions to start/stop embedded IP stack traffic capture
- Capture modes:
  - to "pcap" file
  - streaming to Wireshark tool
- Wireshark tool path and options configuration available through preference page

#### Step by step debugging:

*For Open AT applications:*

- Embedded GDB (*only with Firmware 7.45 and above versions*)

*For Mini Core applications:*

- JTAG

## 6. Remote device connectivity through AMS server (Open AT devices only)

### Connection:

- Server connection setup and configuration
- Monitoring of operations between device and server
- Device wake up triggering through SMS
- Device information fetching
- Device reset action

### Firmware Management:

- Trigger for Firmware update remote operation

### Application Management:

- Start/Stop/Erase application actions
- Application update on the remote device:
  - Full binary download
  - Management of deltas from former versions for lighter over-the-air download
  - Capability to package and deploy a file system image when updating the application

### AT Commands:

- AT commands send action
- AT commands execution results log

### Traces:

- Remote trace collecting session configuration (levels, triggers, compression, log size)
- Remote trace logs management (list, notification, fetch, delete)
- Remote traces logs replay with uptime indication

## 7. Miscellaneous

- Capability to install Developer Studio components separately (Target Management, Development Environment and Toolchains)
- Software Updates automatically checked on start-up
- Generic Software installer allowing to download and install latest software versions
- **[New in 3.0]** Based on Eclipse Kepler 4.3.1 ([What's new](#)) and CDT 8.2.1 ([What's new](#))
- Integrated Help
- Integrated Software Update
- Technical report editor
- Notification center for messages concerning software updates and remote device connections
- Integrated unified search support on online help, Developer Zone and Developer Forum
- Developer Community news (articles and forum posts) access and update notifications
- Windows Platform Support: Windows XP, Windows Vista, Windows 7, Windows 8
- Linux Platform Support: tested on Ubuntu and Debian distributions  
*Available only by installing over an existing Eclipse platform.*
- Developer Studio source code available  
*Available only by installing over an existing Eclipse platform.*

## 8. Deprecated Features

Support of Open AT Application Framework versions former than **2.5X** (including older architectures like Open AT SDK and related hardware or features) has been discontinued starting from Developer Studio 3.0 release.

To continue using these features on former Open AT Application Frameworks, it is recommended to keep using Developer Studio 2.3.X versions and not to install 3.X releases, in order to ensure tooling compatibility with these frameworks versions.

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## Known limitations & bugs

### 1. Build system

- Workspace paths with space characters are not supported

### 2. Target management

- **Windows 64 bits USB support for Open AT 3G/CDMA devices:** Due to some unstability in the integrated native library managing serial ports handling, Developer Studio should crash when reset occurs on these devices.
- **Linux USB support for Open AT devices:** After a device reset with USB connection, sometimes the connection is broken since the USB port identifier has changed. It's necessary to close the port, refresh the port list and reopen the port again to resume the connection with the device.

### 3. Run & Debug

- **Two breakpoints limitation:** When using embedded GDB on Open AT, the 2 active breakpoints limitation can cause unexpected behavior when 2 breakpoints are active and the **step into**, **step over** and **step return** actions are used in the debugger. It is recommended to disable breakpoints (or to let only one active breakpoint) to get a reliable behavior when using step by step debugging.
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## Bugs fixed and minor enhancements

### Release 3.0

#### 1. Packages Management

- Packages views now display information on hardware supported by a given package.
- Packages views content can now be filtered by entering a module name: only compatible packages will be displayed

#### 2. Development

- Fixed issue on delta generation for SL8 devices
- Added management of delta generation for Q2698 devices
- Added possibility to install packages from the project creation wizard

#### 3. Target Management



- Fixed too short timeout after download (in particular Firmware upgrade) on 3G and CDMA devices
- Fixed random bug causing download procedure to stay blocked until it is cancelled
- Fixed trace view log button bad toggle behavior when using the global "start logging" action
- Fixed performance issue when an Open AT device switches rapidly between production and development mode

## **Release 2.3.2**

### **1. Development**

- Application repository management, allowing to store applications versions (mainly for delta generation management)

### **2. Target Management**

- Displays tried speeds when detecting target settings
- Command scripts: added capability to group/loop commands
- Command scripts: added capability to insert pauses
- Command scripts: added capability to wait for unsolicited response
- File system view: added option to show/hide files size and time
- Target Management initialization time improved by 60% (faster loading once the environment is launched)
- Automated detection of device locked in Development Mode on another port
- Support of slow connection speeds, mainly to address Mini Core applications use cases
- Backtraces view: better decoding errors handling (avoiding global procedure to fail)
- Remote Device Connections: added choice of server instance
- Remote Device Connections: added capability to cancel operations
- Remote Device Connections: added management of new authentication mechanism (2FA) supported by Airvantage Server 13.3 and higher
- Fixed TM support on Ubuntu 13.04 linux distribution
- Fixed bad handling of port close while trace logging was running
- Fixed: copy-paste wasn't working anymore in trace view
- Fixed: content of trace view wasn't saved anymore when start logging
- Fixed communication freeze while using extended characters in command scripts
- Fixed bug on port opening with not supported (high) speed
- Fixed layout bug in several views, causing scrollbars to appear when not necessary
- Reduced latency to detect that a device has switched in download mode
- Fixed global application freeze when refreshing port list with some kind of SL808xT/Q2698 devices plugged on the system
- Fixed console encoding to display some extended Latin characters (e.g. é, è, etc...)
- Fixed too short timeout on device detection on 3G/CDMA USB devices

## **Release 2.3.1**

### **1. Packages Management**

- Support for SL301X/SL501X modules

### **2. Development**

- Default optimization option set to -O2 for RVDS Debug configurations
- Default -map linker option added for RVDS configurations

- Supports Open AT application for SL301X/SL501X modules
- Fixed: Scatter file reset on clean build issue (for Mini Core projects)
- Fixed: Special paths handling for RVDS compiler in generated makefiles
- Fixed: Fixed bug when modifying version in Application Settings editor
- Fixed: Fixed bug on build of application projects integrating inter-dependending libraries

### 3. Target Management

- Added action to synchronize device's RTC with the PC one
- Updated trace logging behavior options (default path, prompt)
- Reworked and clarified serial port settings management
- Added capability to collect Firmware RAM dumps even from ports in production mode
- Updated supported speeds above 1Mbits/s for serial ports
- Support for SL301X/SL501X modules USB connectivity
- Improved upload/download performances in File System view
- Added filtering capability in traces view, to show only the highlighted lines
- Improved traces view performance, introducing far more responsive display of incoming traces
- Fixed: Restored capability to create several instances of Target Management views
- Fixed: Project-port link removal when port or project disappears
- Fixed: File System view upload (from device to PC) issue
- Fixed: Communication stack rework and improvements, allowing to fix performance issues when many data is received from the device (e.g. in USB)
- Fixed: Display issues causing the status page to be refreshed too often, making the information loading step quite long
- Fixed: Console view focus and unwanted instances bugs
- Fixed: AT commands unresponsive in some use cases (including command scripts)
- Fixed: Restored progress indicator when uploading/downloading in File System view
- Fixed: Restored capability to instantiate several times the console view
- Fixed: Bad information parsing on SL808XT and Q2698 modules

## Release 2.3.0

### 1. Miscellaneous

- Capability to handle technical reports even in "Target Management only" installation mode

### 2. Packages Management

- Drag'n Drop install support
- Available and Installed packages views filtering
- Companion chip options handling for Library packages

### 3. Development

- Open AT Lua Development Environment is now installed in separated optional plug-ins
- Added **References** node in project explorer, allowing to display/modify project references
- Added support for Q2698/FX100 modules (build for ARM11 cpu)
- Automated build number appended to the application version, allowing to be sure that each new build produces a new version.
- Fixed exception on startup when at least one project misses a package dependency

### 4. Target Management

- Added capability to configure Traces buffer overwriting mode
- Added progress bar when playing back content from a record file
- Added echo for AT commands internally sent by Developer Studio
- Improved target status load time: don't systematically refresh Heap/Tasks status anymore
- Added support for 1,5 and 3 Mbits/s speeds connections
- Added capability to modify a trace profile
- Added action to open a connection without sending any request (to address devices without AT commands interface)
- Added support for Q2698/FX100 modules
- Fixed bad Open AT application start address warning when running on FW 7.47
- Fixed progress monitor behavior on file system download/upload operations
- Fixed an issue in console background color persistence over a restart
- Fixed sorting issue in Memory Access view + added filter capability
- Fixed erratic TM console behavior: it is now definitely separated from the other Eclipse consoles (build, debug...)
- Fixed RTE mode issue, preventing to use the RTE debug

## **Release 2.2.1**

### **1. Development**

- Fixed binary file generation bug (4 bytes addresses offset) for C++ applications

### **2. Target Management**

- Record files are now indexed with time indication
- It's now possible to start recording before trying to connect to a module
- Replay (from virtual port) can now be performed in linear mode (legacy mode), real-time mode and frame by frame mode
- Added capability to configure log (console and trace) files auto-rolling (log file splitting as soon as a configured size is reached)
- Added capability to configure automatic FW RAM dump collection (without prompting the user)
- Fixed bad behavior in Windows > Show view menu
- Fixed frozen SL808XT module USB port state when stressing open and close actions
- Fixed confusing labels for SL808X and SL608X series
- Fixed FW RAM dump triggering issues (missed dump notifications)
- Fixed console display issue when timestamping is active, and lines contain "\$" character
- Fixed non-default settings usage for serial connections

### **3. Debug**

- "Reset before" debug session behavior fix

## **Release 2.2.0**

### **1. Packages Management**

- Enhanced packaging capabilities for multiple module types

### **2. Development**

- Fixed: Packages selection error when changing dependencies in library project creation wizard

### **3. Target Management**

- Added capability to enable/disable ports on the target
- Online help enhancements for AT commands in console
- Added links from most of TM views to Memory Mapping view
- Added support for SL808X modules
- Added pre-download checks for module type, and if DWL file contains memory mapping
- Added visual decorator when waiting for USB connection while target is resetting
- Added application delete action
- Fixed: Flash objects partitions reading bug on big flash memories
- Fixed: Devices view layout minor bug fixes
- Fixed: AXF file locking bug when selected in Backtraces view
- Fixed: Timeout bugs on connection and target information loading
- Fixed: Retry counter bug in XModem download when there is more than 10 packets failure
- Fixed: Bad backtrace title when decoded "in live" (i.e. just before target reset)
- Fixed: Some USB ports disappeared once opened and ports list is refreshed
- Fixed: Regression: it wasn't possible to start a download when the module is blocked in bootloader mode
- Fixed: Backtrace decoding in C++
- Fixed: USB reset support under Linux

#### **4. Build**

- Supports Open AT application build for SL808X modules

### **Release 2.1.1**

#### **1. Target Management**

- Enhanced sanity checks before and after download operations
- New "Devices" view actions and information layout
- Change target baud rate in few clicks
- Detected baud rate display (when baud rate detection is enabled)
- Warning in traces configuration if running application isn't configured to embed traces
- Added task identifier information in decoded backtraces title
- Improvements and check steps added to open/close/info loading operations
- Support of reset over new USB ("as COM port") driver
- Fixed trace view scroll bug as soon as display buffer is full
- Fixed trace view replacement bug for "%" characters

#### **2. Development**

- Improved project dependencies management, now based on CDT "Export Settings" feature
- Added capability to let interwork ARM EABI GCC and RVDS build configurations
- Fixed many issues in project dependencies management
- Fixed delta generation bug for applications built with ARM EABI GCC
- Added new toolbar button to create a new Include Folder in one operation
- Default memory configuration set to 1MB+ in project creation wizard
- Now support build configuration creation from standard CDT UI (Build Configurations Manager)
- Introduced concept of "common settings" (i.e. settings common to all build configurations); these settings are automatically applied to any newly created build configuration.
- Persist active build configuration in project settings (i.e. over a project import)
- Added traces tooltips configuration in Application Settings editor
- Fixed many issues in build configurations creation/copy handling
- On new project creation, automated filling of name and version fields in Application Settings

editor, even for sample-based projects

### 3. Build

- Support of multiple configurations selection in headless build command
- Fixed include error detection marker

### 4. Debug

- Improved sanity checks before debug session (GDB or JTAG), making debug session setup more reliable and easy
- Download and target check can now be performed in JTAG debug session
- Updated JTAG and GDB cheat sheets
- Fixed serial port persistence bug in debug configuration

## Release 2.1.0

### 1. Miscellaneous

- Fix bug in Internet connectivity initial check

### 2. Packages Management

- Added filtering capabilities in Package Manager preferences
- Fix available repositories "disappearance" bug when updating Developer Studio (fix efficient when updating from 2.1.0 release)
- Bug fix: made "cancel" buttons efficient while installing package, and while looking for package updates

### 3. Build

- Generates new **DS\_DEBUG** symbol when active configuration is a "Debug" one
- Catch "file not found" link error in problems view
- Fixed random build bug in headless mode
- Fixed exception when editing task table and trying to remove main task

### 4. Target Management

- Save enabled levels information in traces log file
- New option to start immediately a new traces log file
- Default trace log file path proposal takes care of the project link, if any
- Separated commands console view, allowing to deal separately with build and TM consoles
- Fixed: traces view columns width/enablement persistence
- Fixed: display bug when trace contains more than 6 "%" replacement characters

### 5. Debug

- Added options to reset target before and/or after a GDB debug session
- Added check to prevent starting debug session with a "Release" configuration
- Fixed several bugs regarding launch configuration creation
- Fixed JTAG launch configuration handling
- Fixed Step-by-step debugging bug (fixed in Firmware 7.46)

## Release 2.0.0

## 1. Miscellaneous

- Remove embedded JRE to reduce final install size by 10%
- Dependencies to Developer Studio components and requirements are now flexible enough to let the user upgrade them without having to wait for the next DS official release.
- Fix bug in source plug-ins installation (for build system)

## 2. Packages Management

- Autodetect WIPSoft application nodes in WIP plug-in packages
- Fixed packages installation bug in **Program Files** directory with Windows Vista/7

## 3. Build

- Added -O3 option management in ARM compilers
- Make headless build fails on compilation error
- Bug fixed in conversion job when Firmware package dependency is missing

## 4. Target Management

- Added preference to display warning when unknown trace ID is received
- Traces elements filter checkbox state is now saved in the preferences
- Added preference to remember user decision when asking to redownload the same dwl file
- Added confirmation dialog when requiring for Backtraces cleaning
- Added link to detected Firmware package in status view
- Updated some messages (already opened port, no backtraces stored)
- Fix bugs on remote traces CSV file initialization and reload
- Fix memory leak bug on long traces recording sessions (e.g. recording traces from three modules on one whole night or more)
- Fix bug on Firmware "DUMP" traces decoding
- Fix bugs on backtraces decoding (automatic refresh on target reset now disabled, decoding performances enhanced as soon as AXF file is unchanged, cancel button now efficient during long-running operations)
- Fix bug on AXF file selection in Backtraces view
- Fix bug on backtraces decoding on 3G FXT modules

## 5. Debug

- Display a warning when more than 2 breakpoints are enabled in Open AT Target Debug Configuration
- Fixed "com0com" installation issue for RTE debug

## Release 1.2.0

### 1. Packages management

- Already installed packages are grayed in available packages view, and install action is disabled on them
- Capability to import packages from another Developer Studio install
- Fixed: packages sorting order in all views

### 2. Develop

- Added possibility to disable application settings editor (and to remove generated.c file)
- Modified trace embedding configuration terminology
- Automatic update + lock of memory type configuration when using plug-ins requiring 1MB+ settings
- Fixed: synchronization issues between the UI and the really used build configuration (dependencies include paths not updates, etc...)
- Fixed: toolchains choice restricted by plug-ins selection in the project creation wizard

### 3. Build

- Added capability to tag a file, in order to always recompile it on each build
- Added capability to configure error parsers
- Highlighting include and link errors in problems view
- Many fixes concerning link issues with ARM EABI GCC toolchain (C++, inline code)
- Added capability to configure GCC linker script to map sections to application code or RAM areas
- Fixed: delta generation bug introduced in 1.1.2

### 4. Run & Debug

- Capability to change the used port in launch configurations
- Fixed: perspective switch to Target Management is configurable on Open AT Target application run/debug

### 5. Miscellaneous

- Added Linux 64 bits support

### 6. Target management

- Fixed: Developer Studio crashes on operations related to Target management (connect, baudrate autodetection, download)
- Fixed: Trace logging is disabled as soon as the target resets
- Fixed: Target info view is not automatically refreshed
- Added capability to configure Traces and Console buffers length
- Added capability to configure Traces file logging format
- Added action to reset the module
- Added capability to start a download even if module is already in bootloader mode
- Explicit status markers on configuration/connection issues in Target Management views
- Added capability to configure Traces timestamp format
- Added capability to restore production mode when closing connection and/or Developer Studio application
- Fixed: handling of +++ and Ctrl-Z/ESC for text commands in the console
- Fixed: %p handling in traces
- Fixed: target reset handling over USB connection

### 7. Headless mode / Packages integration

- Add capability to package both **Debug** and **Release** built libraries
- Add capability to package "ready to download" applications
- Add capability to package plug-ins with libraries
- Make -samplelib option working with libraries from other plug-ins (in wmnew.opt files)

### Release 1.1.2

## 1. Packages management

- Implemented: background install procedure + "proportional" progress monitor
- Package column in Installed Packages view is now resizable (to show full package name when it is too long)
- Release note tab added in Properties view when selecting a package in Installed Packages view
- Added a confirmation dialog when deleting a repository from Available Packages view
- Fixed: Software Updates were not working after a package installation
- Fixed: Exception when trying to install new package while updates checking job was running

## 2. Develop

- Generated files names & paths are now changeable in the Application Settings editor.
- Application Settings editor reworded for clarification
- Bugs fixed concerning application settings editor content reseted when project properties are modified
- Used plug-in version selection bug fixed (both old and new versions were kept until old version was unselected again in the UI)
- New project location edit box not cleared anymore when default checkbox is unselected
- Code editor: grayed sections are now matching with the currently active build configuration

## 3. Build

- Error parsers enhanced to report missing errors wrt. the console output
- Added graphical decorator on the currently active build configuration output folder in the project explorer
- Configure ARM license variables definition in a separated preference page
- Fix usage of tcc with RVDS; now use armcc with the relevant option to choose Thumb or ARM mode

## 4. Run & Debug

- Fixed: launch configuration was locked when previous launch was canceled due to compilation errors
- Fixed: "Label error" issue on breakpoint stop in RTE

## 5. Miscellaneous

- Added Windows 7 support

## 6. Headless mode / Packages integration

- Add -mem option support in wmnew.opt files for samples integration
- Add requiredMemTypeID property support for packages integration, to force a required memory type on project creation, when depending on the integrated package
- Add stackSizeProcessingRequired property support for packages integration, to declare if integrated samples source codes already manage stack size declaration according to the used toolchain, or not.
- Add helpBooks property support for packages integration, to declare a list of HTML help books to be integrated
- Bug fixed: when creating in headless mode a sample project depending on a sample library (e.g. Application\_Download), the dependency reference was not correctly set and the project was not building correctly.
- Modified default RVDS options to make link possible with new EABI compatible GCC.



## **Release 1.1.1**

### **1. Install / General**

- Issues fixed regarding install/uninstall of some packages

### **2. Build system / Open AT Projects management**

- Popup error messages when project package dependencies are missing have been replaced by error markers in the Problems view
- When changing a project's dependency on an SDK profile, all packages dependencies are modified (including plug-ins)
- ATI9 info was not always updated when modifying project dependencies
- Sometimes, "An internal error occurred during: "C/C++ Indexer" message was appearing at project creation/import.
- Library projects dependencies are now managed automatically
- It is now possible to import a project created under a Windows Developer Studio into a Linux Developer Studio

### **3. Run & Debug**

- Trace and shell views were closed when launching a new Run/Debug session

## **Release 1.1.0**

### **1. Install / General**

- Uninstall of packages was refused if used by at least one project.
- Help > Software Update menu was not enabled on 1.0.2
- Fix display/indexing issues on Traditional Chinese OS and others

### **2. Build system / Open AT Projects management**

- Developer Studio created project was unable to build after import if it had dependencies on other workspace projects
- ARM ELF GCC / MinGW build was failing if path to SPM Registry is too long (>~100 characters, ie. workspace path >~50 characters with default settings)  
Now embedded compilers are managed in Developer Studio install location, and a warning is displayed in Developer Studio preferences if the install path is too long.
- Cleaning of unnecessary files on project import from IDE V1/creation from a sample

### **3. Target management**

- Debug traces logging to file feature was not usable ("cyclic buffer" behavior, beginning of the file was lost after some time)
- Confirmation messages removed on connection/download success
- Text AT commands (a.g. AT+CMGW) were not supported in shell (Ctrl-Z did not work)

### **4. Run & Debug**

- Warning message when trying to start several launch session at the same time.
- Automatic connection to the target (if not already done) when launching for the first time.

## **Release 1.0.2**

## **1. Install / General**

- Desktop/Start menu shortcuts added for all users
- Online update site available for software update
- "Out of memory" error fixed

## **2. Build system / Open AT Projects management**

- Build errors fixed with ARM ELF GCC & MinGW under Windows Vista
- Remove useless Release configuration for application projects in RTE mode
- Default configurations at project creation time are new Target ARM ELF GCC and RTE MinGW

## **3. Target management**

- DUMP frames sent by the Firmware were not correctly decoded

## **4. Run & Debug**

- Launch configurations (Run/Debug) can be simply created by using the Run/Debug toolbar button
- Automatic switch to Target Management perspective when running a project in RTE

## **Release 1.0.1**

### **1. Install**

- Desktop/Start menu shortcuts added by the Developer Studio light installer
- Windows Vista support issues

### **2. Build system / Open AT Projects management**

- No need anymore to take care about the libraries order on the ARM ELF GCC linker command line
- Some plug-ins samples (e.g. from C-GPS plug-in) dependencies to other plug-ins not correctly managed
- It was not possible to change the current OS version in a library project
- Bad symbol name generation for C-GPS plug-in (makes the build fail with ARM compilers)
- Incremental build was not working (relink of the application was performed on each build request)
- Added by default the -fno-profile option on ARM ELF GCC compiler command line
- IDE V1 project import was not working when source paths out of the project directory were referenced
- IDE V1 library project import was not working
- IDE V1 project import did not import symbols declared with the -flag option
- Several issues fixed concerning IDE V1 projects import depending on library projects

### **3. Target management**

- Target Management Toolbar icons strange behaviour when an automatic build is triggered
- Empty trace levels configuration box after an undetected target reset
- Traces containing a %u format character not correctly displayed
- COM port identifier not correctly configured if greater than 9
- Target management doesn't go anymore to "connected" state if the COM settings are incorrect
- New toolbar button in the trace view usable to force the target back to Debug after an undetected reset

