Xpress New in Release (Summary)

Xpress7.x 追加・修正機能、フィーチャーの一覧です。 詳細は、<u>xpress@msi-jp.com</u> 迄お問い合わせください。

<u>New in Release 7.9</u> (to be planned for 2016) Summary

- Significantly improved linear algebra routines for the simplex solvers improving efficiency of a wide range of problems
- Improved barrier algorithm performance on second order cone problems
- Mosel interface to R analytic language
- Mosel language support for source code annotations
- · Moseldocs documentation system based on source code annotations

New in Release 7.8 (2015.09)

Summary

- New automatic solution refinement tool for LP/MIP models
- · Improvements to solving MIQCP/MISOCP models, including a new quadratic crossover
- Deterministic multistart capability for nonlinear models
- Improved nonlinear presolver
- Mosel model signing and encryption for protection of model integrity and intellectual property.
- Mosel support for new data sources: zip files, json data, https web services.

New in Release 7.7 (2014.11)

Summary

- Robust Optimization for optimization with data uncertainty
- New parallel dual simplex
- Multi-start support in NonLinear
- New Matlab-Mosel integration

New in Release 7.6 Summary

- SOCP/MISOCP: added Second Order Cone (Lorentz and rotated-Lorentz) and Mixed Integer Second Order Cones support to the Optimizer.
- New Mosel module mmhttp handles HTTP requests both as a client and as a server

New in Release 7.5

<u>Summary</u>

- Xpress-NonLinear is a new unified interface to non-linear solvers. SLP and Knitro solvers can now be accessed through the new MMXNLP mosel module and XNLP API.
- Secure connections for Distributed Mosel
- XML reader/writer for Mosel
- Performance improvements to Optimizer, particularily to the Barrier algorithm.
- Xpress-Insight new release including Dashboards, Tableau integration, new Javascript API, REST web service, Table/Filtering enhancements and performance improvements

New in Release 7.4 Summary

- This release of Xpress includes a new version of Xpress-Insight and maintenance updates to multiple Xpress components.
- Multi-user Enterprise configuration for Xpress-Insight for rapid deployment of optimization applications to business users (contact your sales office for more information). Release notes for Xpress-Insight are available in the seperate document.
- Note that support for Baby (white parallel port) dongles is removed.

New in Release 7.3

Major enhancements summary

- New software Xpress-Insight for rapid deployment of optimization applications to business users (seperate download, contact your sales office for more information)
- MacOS 10.7 64bit platform support
- AVX support. The Barrier solver will now take advantage of Intel 痴 Advanced Vector Extensions (AVX) when available.
- Imroved Barrier performance, especially on modern Intel CPUs.
- Support for more than 64 cores on Windows 2008R2, Windows Vista and Windows 7.
- New symmetry detection and orbital branching technology for solving mixed integer models
- New standalone library XPRD for remote invocation of Distributed Mosel in enterprise environments

- Zlib compression module for Mosel I/O
- Mosel interface to the Amazon EC2 cloud for provisioning of cloud resources
- Significantly improved performance, convergence and analysis functionality for non linear models with the SLP solver

Platform support

- Added support for MacOS 10.7 64bit platform (equivalent support for Xpress components as the other non-Windows platforms)
- Removed support for HP-UX Itanium2 platform