

Sirius Update

SUG 2007

New York City



Gary Gregory



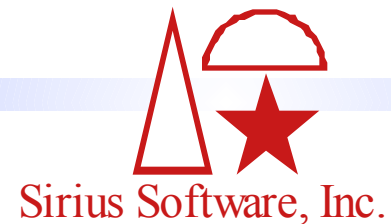
Sirius Software, Inc.

The Red Sox Rule !



Standings Al-East

Team	W	L	PCT	GB
Boston	30	13	.698	-
Baltimore	20	24	.455	10.5
NY Yankees	19	23	.452	10.5
Toronto	19	24	.442	11.0
Tampa Bay	18	25	.419	12.0



A New Candidate for the "Eleven" Series

- BMW Oracle Racing
 - a technology partnership
 - best and the brightest
 - best funded entry in America's Cup
 - the early odds-on favorite
- \$200,000,000+ later ...
 - eliminated 1-5 in the Louis Vuitton semi-finals
- Kind of like a PeopleSoft deployment...
 - over-hyped technology
 - bad management



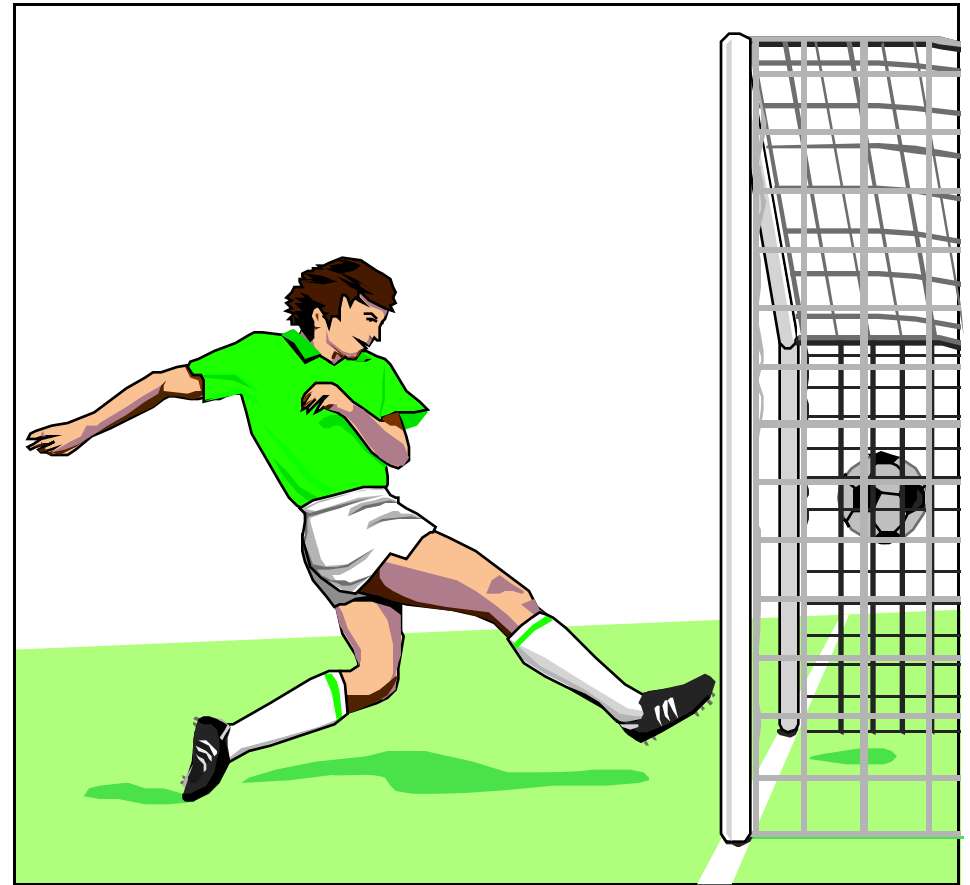
Agenda

- Recent Sirius releases
- Preview of upcoming releases
- Longer term directions
- Questions



Recent Sirius Developments

- Sirius Mods 6.9 - August, 2006
- UL/SPF 6.9 - January, 2007
- Sirius Mods 7.0 - February, 2007



Sirius Mods Version 6.9

August, 2006

- Support for last year's scalability and performance enhancements
 - 64-bit Model 204 buffer pool
 - new database file formats
 - ▶ Table X
 - ▶ FILEORG=X'80'
- Dropped support for Model 204 V5R1
 - very difficult to support multi-mode programming
 - ▶ 64-bit and 31-bit



Sirius Mods Version 6.9

August, 2006

- Full GA of the two debugger products
 - Janus Debugger
 - Sirius Debugger (3270)
- Support for Perl-style regular expressions
 - originally added for supporting XML Schema
 - O-O (StringList) interface for parsing and pattern matching
 - ▶ match
 - ▶ capture
 - ▶ replace
 - \$functions for the luddites



Sirius Mods Version 6.9

August, 2006

- More O-O enhancements
 - narrowing assignments (with controls on use)
 - class tests
- More XML API features
 - namespace flexibility on inserting XML subtree
 - ▶ DefaultURI argument to InsertSubtreeBefore
 - ▶ relaxation of Namespace requirements
 - Namespace retrieval functions
 - ▶ PrefixURI function
 - ▶ DefaultURI function
 - SortCanonical option for serialization



Sirius Mods Version 6.9

August, 2006

- Improved error handling
 - FUNCOPTS=X'02' to cancel if CCATEMP full on \$-list
 - name of argument in error added to error messages for system methods
 - InvalidCharacterPosition function for XmlDocument class
- Integrated Telnet server for Model 204
 - requires Janus Sockets
- SirTune data collector integrated with Model 204
- High-performance math functions eliminate need for IBM program products



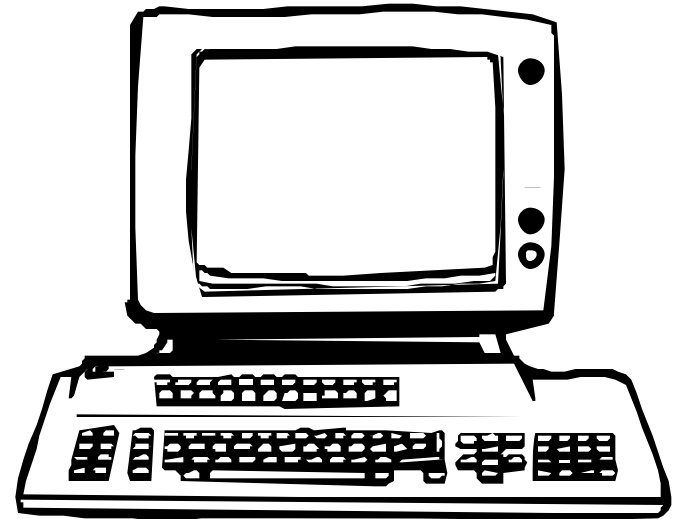
Janus Debugger

- Provides state of the art IDE for UL
 - sophisticated GUI
 - integrates with editors
- Designed from the start for distributed applications (SOA and browser)
 - supports multiple-onlines
 - shows auditing info from multiple sources
- Powerful tracing tools facilitate debugging of programs written by others
- Fully supports Janus SOAP ULI O-O along with multiple levels of daemons



Sirius Debugger

- Ability to debug non-Janus applications
 - ie, 3270 screen-based applications
- Same GUI interface as Janus Debugger
 - does not interfere with 3270 presentation
- Separately licensed product
 - same licensing/pricing structure
 - a discount for owning both
- Combination allows debugging of a 3270 thread that invokes a web service on possibly different online



UL/SPF Version 6.9

January, 2007

- SirMon
 - additional statistics
 - revamped system overview screen
 - background monitor with alerting
 - Janus Port monitoring
- SirPro
 - more support for "Mod 6" terminals



Sirius Mods Version 7.0

February, 2007

- Limited distribution (because 7.1 was on the way)
- Additional 64-bit support and performance improvement
- Documentation improvements
 - Sirius Mods Commands and Parameter Reference
 - re-write of "XPath" appendix in Janus Soap Reference
 - re-write of Regular Expressions documentation
- Extensive enhancements to the Janus and Sirius debuggers
 - elimination of User Language code for worker threads
 - ▶ better performance for client and server



Sirius Mods Version 7.0

February, 2007

- Enhanced Daemon Support
 - Asynchronous daemons
 - ▶ runAsynchronously method returns immediately
 - ▶ daemon can still rendezvous and perform subsequent work
 - Independent daemons
 - ▶ runIndependently method returns immediately
 - ▶ cannot rendezvous
 - MAXBG parameter to limit thread consumption
- Screen objects support O-O 3270 programming
 - requires Janus Sockets



Sirius Mods Version 7.0

February, 2007

- Better handling of fields in group context for File objects
 - request cancel on nonsensical field reference
 - ▶ e.g., update of field not present in current file
- Tests for field characteristics
 - Is [Not] Defined | Visible
- Better control of record locking for File objects
 - loopLockStrength property specifies locking on loops
 - ▶ independent of "Find-level" locking from instantiation
- Inheritance allowed from Record objects



Sirius Mods Version 7.0

February, 2007

- More flexibility about namespaces
 - null string SelectionNamespace means "no namespace"
 - IsSelectoinPrefix function
 - DeleteSelectionPrefix function
- Next and Previous methods for XmlNode class
- XPathNodeID method
 - useful for providing error feedback
- Support for numeric comparisons in XPath
 - conforms to the surprising standard



Sirius Mods Version 7.0

February, 2007

- Yet more XmlDocument serialization options
 - ExclCannonical and WithComments options to Serial
 - AddTrailingDelimiter argument of Serial
 - ▶ uses existing "newline" option (LF, CR, CRLF)
 - LineFeedNoTrailingTabs option to Serial
 - ▶ applies to all three "WSP" options
- Better error handling for Xml parsing
 - XmlDocument restored to prior content after parse errors
 - Request cancellation on CCATEMP full



Sirius Mods Version 7.0

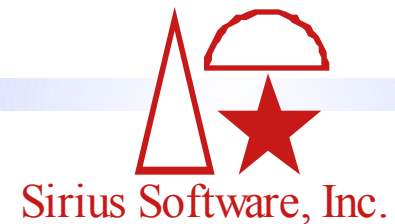
February, 2007

- Initial clause for LongString variables
 - values must be 255 characters or less
- Stringlist class enhancements
 - named parameters for Print method
 - RegexSplit method
 - enhancements to Regex performance
- SirTune
 - SYSPARM report to capture run-time parameters
 - System methods individually reported in QUAD reports, instead of appearing as \$CLASS_METHOD



Current Sirius Developments

- SirAud 1.5 - June, 2007
- Fast/Unload 4.4 - July, 2007
- Sirius Mods 7.1 - July, 2007



SirAud Version 1.5

June , 2007

- Support for merged journals produced by MERGEJ
 - multiple runs correctly decoded
- Better handling of CCAJRNL/CCAJLOG split
- Improved error messages
 - mixed case, clearer
- Some report enhancements
 - in keeping with evolution of Model 204 MP support



Fast/Unload Version 4.4

July, 2007

- Support new file structures added by ASP project
 - Table X
 - FILEORG=X'80'
- Support Model 204 64-bit buffer pool for \$FUNLOAD
- Ongoing exploitation of 64-bit storage
- #FILENAME special variable



Sirius Mods Version 7.1

July, 2007

- Ongoing exploitation of 64-bit storage
 - lots of work, but for now not visible
- Additional O-O enhancements
 - "smart"TM garbage collection
 - sorting for collections (maybe)
- More debugger enhancements



Future Trends for Sirius

- Performance likely to take a back seat, other than
 - ongoing exploitation of 64-bit memory
- Availability and continuous operation looming
 - driven by customer requirements
- Sirius will emphasize programmer productivity
 - continual enhancements to debuggers and IDE
 - increased adoption of O-O technology
 - ▶ eventual re-write of Janus Web Server APIs
 - ▶ more high-level services



Out LINQ'ing Microsoft

- Microsoft Language Integrated Query project
 - recognized shortcomings of O-O "add-ons" for data
 - ▶ embeds support for Xml and relational database structures in CLR
 - ▶ accessed through language extensions
- Future enhancements to Janus SOAP ULI will
 - improve packaging (friends, protected, etc)
 - integrate database security with class structure
 - ▶ e.g. ability to specify that file updates must be via a particular class



Questions?

