

Version History

2.2.10

January 17, 2024

- Added [SRP_Get_Clipboard](#) and [SRP_Set_Clipboard](#)
- Updated [SRP_COM](#) to use 32-bit integers when possible to satisfy some COM servers that don't like 64-bit integers

2.2.9

September 21, 2023

- Added [HANDLES](#) service to [SRP_COM](#)

2.2.8

August 17, 2023

- Updated [SRP_Com](#) to better sanitize object handles with null characters
- Updated [SRP_Com ADDPARAM](#) service to allow passing null objects

2.2.7

May 15, 2023

- Fixed bug in [SRP_JsonX_Get](#) that would crash on certain paths in OI 10

2.2.6

March 27, 2023

- Added [Compare](#), [EQ](#), [EQC](#), [NE](#), [NEC](#), [LT](#), [LTC](#), [LE](#), [LEC](#), [GT](#), [GTC](#), [GE](#), and [GEC](#) services to [SRP_String](#)
- Added [StripRtf](#) service to [SRP_String](#)
- Added [GetTempPath](#) and [GetTempFilename](#) services to [SRP_Path](#)
- Added [BEGINCALL](#), [ENDCALL](#), and [ADDPARAM](#) services to [SRP_Com](#)
- Added [SRP_Is64Bit](#)
- Updated [SRP_Date](#), [SRP_Time](#), and [SRP_DateTime](#) IConv services to set Status() when validation fails
- Updated URL algorithm in [SRP_Encode/SRP_Decode](#).
- Updated [SRP_Show_Window](#) to respect DPI in OI 10
- Fixed bug in [SRP_JsonX](#) and [SRP_JsonX_Set](#) where passing number with leading zeroes with no hint produces invalid Json numbers
- Fixed bug in [SRP_JsonX](#) and [SRP_JsonX_Set](#) where setting Hint to "" set the value to null
- Fixed bug in [SRP_JsonX](#) and [SRP_JsonX_Set](#) where setting Hint to "Bool" would break to debugger if non-numerical value was passed
- Fixed bug in [SRP_JsonX_Members](#) where passing path to non-existing element would crash
- Fixed bug in [SRP_Time](#) and [SRP_DateTime](#) where "t" or "tt" format would use pm instead of am for the noon hour
- Fixed bug in [SRP_Path](#) where [MakeRelative](#) service would crash in OI10
- Fixed bug in [SRP_Registry](#) where it would break to debugger on a READ
- Fixed bug in [SRP_Com](#) where creating new objects would return handles with null characters
- Fixed bug in [SRP_Com](#) where passing -1 for a boolean would be understood as TRUE
- Fixed bug in [SRP_PreCompiler](#) not removing #pre and #endpre directives before compilation
- Fixed bug in [SRP_Get_Uilities_Version](#) where it would crash in OI10

2.2.5

February 17, 2022

- Updated [SRP_PreCompiler](#) FOR EACH loop to be faster and correctly handle trailing ""
- Updated [SRP_PreCompiler](#) to use variables instead dimmed arrays for more performance
- Updated [SRP_PreCompiler](#) to case-insensitively parse unpacking statements
- Fixed bug where [SRP_Get_Window_Rect](#) wouldn't work on OI10 due to WinAPI name changes

2.2.4

January 19, 2022

- Added "ARRAY" hint to [SRP_JsonX](#) routine

2.2.3

December 22, 2021

- Added [SRP_Regex](#)
- Fixed [SRP_Run_Command](#) failing on commands when using the "DOS" or "DOSOPEN" output directives.

2.2.2

November 15, 2021

- Updated [SRP_Run_Command](#) to better handle Unicode and UTF8 output
- Fixed bug in [SRP_Time Parse/ICnv](#) that would not handle missing hour component correctly

2.2.1

October 18, 2021

- Added [Validate](#) service to [SRP_Json](#)
- Fixed bug in [SRP_Time](#) and [SRP_DateTime](#) when formatting times with AM/PM
- Fixed bug in [SRP_Run_Command](#) where utf8 was not being handled correctly for some commands

2.2

August 16, 2021

- Added [SRP_JsonX](#).
- Fixed bug where UTF8 data would get truncated when using [SRP_HashTable](#).
 - Updated all routines to use GetByteSize instead of Len where appropriate to avoid future UTF8 truncations.
- Fixed bug where [SRP_Array Rotate](#) service would skip last element if it was 1 character wide.

2.1.11

April 28, 2021

- Fixed bug in [SRP_PreCompiler](#) where For Each loops would break early if calling gosubs that had other For Each loops in them.

2.1.10

April 21, 2021

- Added [SRP_Get_FileVersion](#)
- Added [SRP_Get_Uilities_Version](#)
- Added [SRP_Stack](#)
- Added [SRP_Get_Fonts](#)
- Added [Clear](#) service to [SRP_List](#)
- Added [Clear](#) service to [SRP_FastArray](#)
- Updated [SRP_PreCompiler](#) to no longer use labelled commons
- Updated [SRP_Get_Printers](#) to treat "" as "Local"
- Updated [SRP_Get_Printers](#) with service module metadata (for SRP Editor hints and dropdowns)
- Fixed bug in [SRP_Date](#) where using negative numbers in [AddMonths](#) returned wrong results

2.1.9

- Fixed bug where [SRP_List Locate](#) service would not return first item if there were duplicates

2.1.8

- Fixed bug where [SRP_List_Create](#) would not initialize correctly
- Fixed missing metadata for [SRP_HashTable](#)

2.1.7

- Updated [SRP_PreCompiler](#) to support unlimited Events, Services, etc.
- Fixed bug where [SRP_JSON](#) member keys would not escape

2.1.6

- Fixed bug in [SRP_Run_Command](#) where output would not go into variable if it was too long

2.1.5

- Added BASE64URL algorithm to [SRP_Encode](#) and [SRP_Decode](#)
- Added URL algorithm to [SRP_Encode](#) and [SRP_Decode](#)
- Added [AddSeconds](#), [AddMinutes](#), [AddHours](#), [AddDays](#), [AddMonths](#), and [AddYears](#) to [SRP_DateTime](#)
- Added [SecondSpan](#), [MinuteSpan](#), [HourSpan](#), [DaySpan](#), [MonthSpan](#), [YearSpan](#), and [Span](#) to [SRP_DateTime](#)
- Added [Split](#) service to [SRP_DateTime](#)
- Added [AddSeconds](#), [AddMinutes](#), and [AddHours](#) to [SRP_Time](#)
- Added [SecondSpan](#), [MinuteSpan](#), [HourSpan](#), and [Span](#) to [SRP_Time](#)
- Added [AddDays](#), [AddMonths](#), and [AddYears](#) to [SRP_Date](#)
- Added [DaySpan](#), [MonthSpan](#), [YearSpan](#), and [Span](#) to [SRP_Date](#)
- Updated [SRP_Run_Command](#) to support both OI 9 and OI 10

2.1.4

- Fixed bug in [SRP_Array](#) where [Join](#) and [Reorder](#) services truncated results if it contained UTF8.

2.1.3

- Fixed bug in [SRP_Array](#) where [Rotate](#) service truncated results if it contained UTF8.

2.1.2

- Added [IsDaylightSavings](#) to [SRP_Time](#) service.
- Fixed bug in [SRP_String](#) where [GetWidth](#) and [GetHeight](#) returned incorrect values.

2.1.1

- Updated [SRP_PreCompiler](#) with new Extended BASIC+ syntax: Unpacking
- Updated [SRP_JSON](#) with two new services: [AddValueArray](#) and [SetValueArray](#)
- Updated [SRP_JSON](#) New service to allow initialization of new ARRAY type node
- Fixed bug in [SRP_String TokenizeCode](#) service that was not detecting end of comment block correctly
- Fixed bug in [SRP_JSON](#) where [SetValue](#) would not work with ARRAYS.
- Fixed bug in [SRP_PreCompiler](#) where Service module with no services would not compile correctly

2.1

- Added [SRP_Date](#)
- Added [SRP_DateTime](#)
- Added [SRP_Num](#)
- Added [SRP_Time](#)
- Updated [SRP_StopWatch](#) to use more accurate TimeGetTime instead of GetTickCount.
- Updated [SRP_String TokenizeCode](#) service to include new State parameter to preserve parser state between calls.
- Updated [SRP_PreCompiler](#) to properly ignore /* Comment Blocks */

2.0.6

- Added [Reverse](#) service to [SRP_Array](#)
- Fixed bug where UTF-8 strings would get truncated during [SRP_Array CLEAN](#)

2.0.5

- Added ReportErrors parameter to the [SRP_Json PARSE](#) service.

2.0.4

- Fixed [SRP_List ADD](#) service to correctly return the newly added item's index

2.0.3

- Updated [SRP_Sort_Array](#) and [SRP_Array's SortRows](#) and [SortSimpleList](#) services to support true numerical sorting
- Fixed [SRP_Json](#) outputting Unicode characters as \uFFFFxxxx sequences instead of as UTF-8.

2.0.2

- Updated [SRP_Com](#) to better handle properties and methods that return SAFEARRAY types
- Updated [SRP_Json](#) to only escape solidus when requested
- Updated [SRP_Json](#) to escape all control characters (not just the major ones) as unicode sequences
- Fixed bug in [SRP_Json](#) where reserved characters were not escaped
- Fixed bug in [SRP_Com](#) where property and method names were case-sensitive instead of case-insensitive
- Fixed bug in the [SRP_Array ROTATE](#) service where results were getting truncated
- Fixed bug in the [SRP_Array CLEAN](#) service where process would sometimes hang
- Fixed bug in [SRP_Encode](#) where encoding large amounts of data with BASE64 could take minutes to complete
- Fixed bug in [SRP_Math](#) where [RANDOM](#) would return "" instead of 0
- Fixed bug in [SRP_Math](#) where significant zeros would get truncated

2.0.1

- Updated [SRP_Json GET](#) and [GETVALUE](#) services to support escaped operators '[', ']', '<', '>', and '.' by repeating them twice
- Fixed bug where [SRP_Array CLEAN](#) service would hang if the array contained only delimiters
- Fixed bug where [SRP_String GETWIDTH](#) service would not correctly calculate width
- Fixed [SRP_Com](#) not returning 1-byte safe arrays correctly
- Fixed [SRP_Path COMBINE](#) service mangling UNC paths

2.0

- Added [GETELEMENTS](#) service to [SRP_Json](#).
- Updated [GETMEMBERS](#) and [STRINGIFY](#) services of [SRP_Json](#) to include Sorted parameter.
- Updated [SEND](#) and [SEND_SES](#) services of [SRP_TcpClient](#) to return 0 if send fails.
- Rewrote DLL so it can be compiled in 64-bit. Made other improvements in the process.

1.6

- Fixed missing DLL stubs for [SRP_FastArray](#).
- Fixed rounding bug in [SRP_Math ROUND](#) service.

1.5.9

- Updated [SRP_Json STRINGIFY](#) service to no longer append trailing Line Feed character.
- Updated [SRP_Stopwatch ShowAll](#) service to automatically display total time if there are more than one times.
- Updated [SRP_Stopwatch](#) to allow Name parameter to be omitted for quick single timers.
- Fixed [SRP_Stopwatch](#) bug where single character names would fail to work correctly.

1.5.8

- Added [RECEIVE](#) service to [SRP_TcpClient](#).
- Fixed bug in [SRP_TcpClient SEND](#) service triggering VNAV errors.
- Fixed [SRP_Encode](#) regression where Option parameter went missing.

1.5.7

- Added [SRP_String](#).
- Added [SRP_Array](#), [SRP_List](#), [SRP_FastArray](#), and [SRP_HashTable](#), which are all service oriented wrappers around existing SRP Utilities methods.
- Added inserts for convenience: SRPARRAY, SRPLIST, SRPFASTARRAY, and SRPHASHTABLE
- Fixed bug in several routine where UTF8 encoded Unicode characters would not decode properly.

1.5.6

- Add [PathToUnc](#) service to [SRP_Path](#).
- Fixed bug in [SRP_Json](#) where return values would sometimes return question marks.

1.5.5

- Added [SRP_Path](#).
- Updated [SRP_Json GETVALUE](#) to support default value to be returned when <null> would be returned.
- Updated [SRP_Extract_XML](#) to return just the value of attributes instead of 'Attribute="value"'.
- Fixed bug in [SRP_List](#), [SRP_FastArray](#), and [SRP_HashTable](#) where GetVariable would return question marks.
- Various bug fixes.

1.5.2

- Added support for "NULL" type in [SRP_Json](#).

- Updated [SRP_Json](#) to automatically determine type based on value when type is not specified.
- Updated [SRP_Com](#) to support the SAFEARRAY type.
- Fixed bug in [SRP_Com](#) where some COM objects whose type libraries were unavailable wouldn't work.

1.5.1

- Fixed bug in [SRP_Json](#) where extracting numeric values was causing a crash.

1.5

- Added [SRP_Json](#) and [SRP_Stopwatch](#) stored procedures.

1.4.8

- Added [SRP_Get_Printers](#) and [SRP_Get_PrinterInfo](#) stored procedures.
- Fixed [SRP_Run_Command](#) bug where calling built-in DOS commands wouldn't work if parameters were included.

1.4.7

- Added Options parameter to [SRP_Encode](#).
- Fixed [SRP_Encode](#) bug where encoding would not work correctly in some cases when UTF8 mode was enabled.

1.4.6

- Fixed [SRP_Extract_Xml](#) bug where escaped sequences, such as "%amp;" were not being decoded when accessing the "text()" of an element.

1.4.5

- Added [SRP_Trim](#) function for more advanced string trimming.

1.4.4

- Fixed [SRP_Math](#) bug where the [RANDOM](#) operation would produce the same number if called too quickly.
- Updated [SRP_Math](#)'s [RANDOM](#) operation to allow caller to pass a minimum and maximum value.

1.4.3

- Fixed [SRP_Hash](#) bug where it still would not return a hash value for empty input strings.

1.4.2

- Added [SRP Hash Table](#) methods for high performance in-memory tables.
- Fixed [SRP_Hash](#) bug where it would not return a hash value for empty input strings.

1.4.1

- Added [SRP_OI_To_Win32](#) method for easily converting BASIC+ values into Win32 datatypes.
- Added [SRP_Win32_To_OI](#) method for easily converting Win32 datatypes into BASIC+ values.
- Added [SRP_Get_IdleTime](#) method for easily detecting lack of user input.

1.4

- Added [SRP FastArray](#) methods for high performance dynamic array manipulation.
- Added [SRP List](#) methods for high performance single-dimensioned dynamic array manipulation.

1.3

- Added [SRP_Taskbar](#) to perform operations against the windows taskbar, such as altering the text that appears when taskbar buttons are grouped.
- Added [SRP_TcpClient](#) to communicate to TCP/IP socket servers.
- Updated [SRP_Join_Arrays](#) to perform a total of four operations: AND (Intersection), OR (Union), NOT, and XOR.
- Updated [SRP_Sort_Array](#) to use true right-aligned alphabetic sorting for columns that cannot be converted into floating point numbers. This causes Right sorting to work with columns that contain number preceded by text.

1.2.3

- Added SRP_Join_Arrays to quickly return the union or intersection of two arrays.
- Fixed SRP_Clean_Array bug in which the TRIM option was removing blanks everywhere instead of just at the end as is documented.

1.2.2

- Fixed SRP_Hash bug caused by changes to SRP_Encode from previous releases not being included in SRP_Hash.

1.2.1

- Fixed SRP_Sort_Array bug to account for fields with differing number of values.

1.2

- Added SRP_Extract_Xml to allow developers to easily extract XML data using XPath queries.
- Added SRP_Com to allow developers to use COM components from any version of OpenInsight.
- Added SRP_Save_Screenshot to programmatically save screenshots of windows to bitmap files.
- Fixed small memory leak when using SRP_Encode or SRP_Decode.

1.1.3

- Fixed SRP_Math bug in which POWER operation would not allow first value to be negative
- Fixed SRP_Registry bug in which DELETE operation failed to delete values due to lack of requesting deletion access

1.1.2

- Fixed SRP_Math memory leaks
- Fixed SRP_Math bug where operations resulting in very large negative exponents could result in a crash

1.1.1

- Fixed SRP_Math bug where "SUBTRACT" was doing a square root operation due to bad parsing of the instruction

1.1

- Added SRP_Math function

1.0.3

- SRP_Run_Command now supports the DOSOPEN output option, allowing output to appear within a DOS window while also keeping the DOS window opened
- Updated SRP_Run_Command to handle built in DOS commands

1.0.2

- Updated SRP_Run_Command to return Output via return value so SRP Editor can display results
- Fixed SRP_Run_Command bug where DOS option did nothing
- Fixed SRP_Run_Command bug where command would not execute if called outside of an event context
- Fixed SRP_Run_Command bug where output would always be prepended with VAR
- Added missing structures to RDK required by SRP_Run_Command

1.0.1

- Updated SRP_Sort_Array to preserve original positions for rows that are equal. This matches the behavior of V119

1.0

- Initial Release