

Version History

4.0.10

- Changes to the [HTTP_Services](#) module:
 - Update the *AddSubProperty*, *AddSubResourceObject*, and *AddSubResource* services to escape the property name to avoid problems with properties containing dots.
 - Update the *SetRequestHeaderFields* service to support OECGI 4.0.2 and the new *AdditionalValues* value of * by checking first to see if "HTTP_" is a prefix for the name before stripping it away.
 - Fix bug in *CreateLogFile* service so that the *HTTPAdditionalValues* section properly identifies HTTP_ prefixed names before stripping the prefix out.
 - Add the *GetAPIVersion* service.
 - Update the *UpdateWebAPIs* service to better manage multiple resource IDs in the URL so that the actual resource is properly identified. This resolves the problem when attempting to create or update the API routine it was creating a bad procedure name.
 - Add the *GetCookies* and *GetCookie* services. These are wrappers around the *GetHTTPCookie* service and designed to be simpler to use for application use.
- Changes to the [HTTPClient_Services](#) module:
 - Update the *SendHTTPRequest* service to support PowerShell scripts.
 - Replace the *UseClientXMLHTTP* argument with *ClientToUse* to allow for more than two client options.
 - Change method of encoding the body so special characters, like apostrophes, can be supported without creating unbalanced quotes.
 - Update the *SendHTTPRequest* to support binary downloads.
- Changes to the [NDW_HTTP_Framework_Setup_Events](#) commuter:
 - Update the *OLE_TRE_RESOURCES.OnSelChange* event handler so that Resource IDs can create subordinate Resource IDs. This support the concept of the URL having more than one consecutive segment that are Resource IDs.
- Changes to the [Webaccounts_API](#) module:
 - Added *webaccounts.HEAD* API. This appeared to be missing when all HEAD APIs were added.
- Updated the [SYSENVISRP_HTTP_FRAMEWORK_RESOURCES](#) and [SYSENVISRP_HTTP_FRAMEWORK_RESOURCES*FRAMEWORKS](#) configuration rows so the webaccounts resource now includes GET/HEAD methods.
- New API Module: [Binary_API](#).
- Changes to the [Database_Services](#) module:
 - Merged with other versions.

4.0.9

- Changes to the [HTTP_Services](#) module:
 - Update the *SetCookie* service to use Max-Age instead of MaxAge.
 - Update the *SetCookie* service to assume any internal datetime value being passed in is in local time. Use the *ToUTC* service to convert to UTC/GMT time.
 - Update the *SetCookie* service to always append an equal sign (=) to the cookie's name, even if the value is empty. Otherwise, the correct cookie won't get referenced if the intent is to clear the value.
 - Rename *GetNonAuthenticatedURLs* service to *GetNonAuthenticatedPaths* and update the *URLRequiresAuthentication* service to call the new service name.
 - Update the *URLRequiresAuthentication* service to support query param validations.
 - Add the *IsIPWhitelisted*, *GetBannedIPs*, and *IsIPBanned* services.
 - Update the *IPsPermitted* service to call the *IsIPWhitelisted* and *IsIPBanned* services to determine result.
 - Add the *AddBannedIP* and *RemoveBannedIP* services.
- Changes to the [HTTP_Authentication_Services](#) module:
 - Update the *AuthenticateRequest* service to return a 403 status code rather than a 511 status code if the IP making the request is not permitted.
- Changes to the [NDW_HTTP_FRAMEWORK_SETUP](#) form:
 - Replaced OI edit table controls with SRP EditTable controls for managing Non-Authenticated Paths (formerly Non-Authenticated URLs) and Whitelisted IPs.
 - Add new SRP EditTable and info button for Banned IPs.
- Changes to the [NDW_HTTP_Framework_Setup_Events](#) commuter:
 - Replace *EDT_NON_AUTHENTICATED_URLS* (an OI edit table control) with *OLE_EDT_NON_AUTHENTICATED_URLS* (an SRP EditTable control) in preparation of adding new features.
 - Replace *EDT_WHITELISTED_IPS* (an OI edit table control) with *OLE_EDT_WHITELISTED_IPS* (an SRP EditTable control) to remain consistent with the *OLE_EDT_NON_AUTHENTICATED_URLS* control.
 - Replace all references to *OLE_INFO_NON_AUTHENTICATED_URLS* with *OLE_INFO_NON_AUTHENTICATED_PATHS*, including relevant labels and help verbiage. This is to better describe the purpose of this feature.
 - Make changes where needed to support the new Query Params column in the *OLE_INFO_NON_AUTHENTICATED_PATHS* control.
 - Make changes where needed to support Banned IPs.
- Changes to [HTTP_Framework_Setup_Equates](#):
 - Added *HTTP_FRAMEWORK_SETUP_NON_AUTHENTICATED_PATHS\$* as a synonym for *HTTP_FRAMEWORK_SETUP_NON_AUTHENTICATED_URLS\$* (which is being deprecated).
 - Added *HTTP_FRAMEWORK_SETUP_NON_AUTHENTICATED_QUERY_PARAMS\$*.
 - Added *HTTP_FRAMEWORK_SETUP_BANNED_IPS\$*.
- Changes to the [Database_Services](#) module:
 - Add *GetTableNames* service.
- Changes to the [Logging_Services](#) module:
 - Merged with other versions.

4.0.8

- Changes to the **HTTP_Services** module:
 - Update the *SetResponseError* service to correct a typo. It was calling the *SetErrorResponse* service.
 - Update the *GetResponseHeaderFields* service to check the *HTTPScriptName* value and use *LF\$* instead of *CRLF\$* as the delimiter when OECGI is not the .EXE version.
- Changes to the **NDW_HTTP_Framework_Setup_Events** commuter:
 - Fix minor typo in *DisplayInfoHelp* gosub.
- Changes to the **APIRoot_API** module:
 - Fix a minor typo in the *APIROOT.GET* API.

4.0.7

- Changes to the **HTTP_Services** module:
 - Update the *SetResponseHeaderField* service so the Append flag creates multiple Set-Cookie headers rather than folding them.
 - Add *SetCookie* service to make it easier to build a Set-Cookie response header.
- Changes to the **HTTPClient_Services** module:
 - Fix a bug in the *SendHTTPRequest* service so that request headers are properly parsed. All colons were erroneously being converted to @VM instead of the first colon (which separated the header name from the header value).
 - Update the *SetResponseHeaderField* service to better support Set-Cookie headers. Allow multiple cookie names to be stored but only store the value of the last cookie name if it is duplicated.
 - Update the *GetResponseHeaderField* by adding a *Delimiter* argument so the caller can specify an alternative delimiter for the values being returned.
 - Add *GetCookies* service to make it easier to view all cookies returned in the response.
 - Add *GetCookie* service to make it easier to see the entire cookie string of a specified cookie.
 - Update the *GetCookie* service to include an *IgnoreAttributes* argument. If this is *True\$*, then only the cookie name and value will be returned.

4.0.6

- Changes to various service modules and commutators so calls to **Memory_Services** use a private cache name. The primary reason is to avoid conflicts with caches used by the full SRP FrameWorks product:
 - **HTTP_Resource_Manager_Services**
 - **NDW_HTTP_Framework_Setup_Events**
 - **HTTP_Services**
 - **HTTP_Resource_Services**
 - **HTTP_Authentication_Services**
- Changes to the **NDW_HTTP_Logs_Events** commuter:
 - Replace the Utility("RUNWIN") service with *ShellExecute* in the *OLE_RPT_LOGTABLE.OnItemHyperlink* event handler since not all systems work properly with the RUNWIN service.
- Changes to the **HTTP_Resource_Services** module:
 - Update the *AddEmbeddedResources* service so it can be called more than once for the same embedded resource name. New resources will be added rather than replace what is already present.
 - Update the *AddLinkRelation* and *AddLinkRelations* services to support *IsTemplate* (*IsTemplates*) Boolean argument. This is to add support for URI Templates:
<https://tools.ietf.org/html/rfc6570>
<https://tools.ietf.org/html/draft-kelly-json-hal-08#section-5.2>
 - Add *GetURLTemplate* service.
 - Update the *AddLinkRelation* service to call the *GetURLTemplate* service to create a URL Template out of an indicated expanded URL.
- Changes to the **HTTP_Services** module:
 - Update the *CreateLogFile* service to fix a VNAV bug when GetStatus logs are created. Clean up the log row and the log body.
 - Update the *CreateLogFile* service by replacing *Utility_DotNet("TIMEZONE")* with the *SRP_DateTime* service (SRP Utilities 2.1) to avoid localization problems and potential 502 Bad Gateway errors.
 - Update the *RunWebAPI* service to support the HEAD method if the GET method is also supported.
- Changes to the **HTTP_MCP** controller:
 - Update code that calls the *CreateLogFile* service for *Get_Status* conditions so that the status detail is better formatted. Also, clear the error condition to prevent the OECGI from making a *ProcErr* call.
- Changes to the **NDW_HTTP_FRAMEWORK_SETUP** form:
 - Added *OLE_PUB_CONTRACT* control to the Resource Manager page.
- New image: *SRPHTTPTREETOPLEVELRESOURCES (BMPS\SRPHTTPTreeTopLevelResources.png)*
- Changes to the **NDW_HTTP_Framework_Setup_Events** commuter:
 - Update the *UpdateSetupInfo* internal method to get the Item key of the *OLE_TRE_RESOURCES* control instead of hard-coding this to *APIROOT*. This allows the *UpdateURLPath* internal method to set the URL correctly.
 - Update the *WINDOW.CREATE* event handler and the *SetupOLEControls* internal method so the *OLE_TRE_RESOURCES* control no longer defaults all items to be expanded but the *APIROOT* will be expanded upon launch. This is to help make it easier to see long lists of resources.
 - Add *OLE_PUB_CONTRACT.OnClick* handler to display only top-level resources.
 - Enable drag-and-drop with the *OLE_TRE_RESOURCES* control and add the *OLE_TRE_RESOURCES.OnDrop* event so users can re-sort top-level resource items.
 - Modify the *OLE_TRE_RESOURCE_METHODS* control to display "GET / HEAD" rather than "GET".
 - Modify the *OLE_TRE_RESOURCES.OnSelChange* event handler to support the change to "GET / HEAD" in the *OLE_TRE_RESOURCE_METHODS* control.
 - Modify the *OLE_TRE_RESOURCE_METHODS.OnItemCheck* event handler to support the change to "GET / HEAD" in the *OLE_TRE_RESOURCE_METHODS* control.
 - Update the *UpdateWebAPIs* service to add a HEAD API if there is a GET API.
- Changes to the **Ping_API** module:
 - Update the *ping.GET* API by replacing *Utility_DotNet("TIMEZONE")* with the *SRP_DateTime* service (SRP Utilities 2.1) to avoid localization problems and potential 502 Bad Gateway errors.

- Changes to the [WebAccounts_Services](#) module:
 - Update the *ConvertJSONWebAccountsToMV* service by replacing *Utility_DotNet('TIMEZONE')* with the *SRP_DateTime* service (SRP Utilities 2.1) to avoid localization problems and potential 502 Bad Gateway errors.
- Changes to the [Web_Accounts_Actions](#) module:
 - Update the *CURRENT_PASSWORD_CREATED* and *CURRENT_PASSWORD_EXPIRES* calculated column logic by replacing *Utility_DotNet('TIMEZONE')* with the *SRP_DateTime* service (SRP Utilities 2.1) to avoid localization problems and potential 502 Bad Gateway errors.
- Changes to the [NDW_HTTP_FRAMEWORK_SETUP](#) form:
 - Fixed the *OLE_PUB_CONTRACT* control by removing the Bottom Anchor setting.
- Changes to the [HTTP_Resource_Manager_Services](#) module:
 - Update the *SetResourceProperty* and *GetResourceSignature* services to support the *HEAD* method.
- Update the various APIs to include matching HEAD APIs for all GET APIs:
 - [APIRoot_API](#)
 - [Contacts_API](#)
 - [Oauth_API](#)
 - [Picture_API](#)
 - [Ping_API](#)
 - [Version_API](#)
 - [Webaccounts_API](#)
- Changes to the [APIRoot_API](#) module:
 - Update the *APIROOT.GET* service so link relations are templated whenever possible.

4.0.5

- Changes to the [HTTP_Resource_Manager_Services](#) module:
 - Fix bug in the *GetEndpointResourceKeyID* service so that matching the *URLEndpoint* works better.
 - Fix bug in the *GetResource* service that prevented endpoints with a resource ID from being matched correctly to the currently stored resources endpoints.
- New service module: [Logging_Services](#).
- Changes to the [HTTP_Services](#) module:
 - Update the *CreateLogFile* service to create/append a log index in addition to a detail log file. This will be used by the HTTP Logs utility to quickly populate several logs.
 - Fix VNAV in *UpdateWebAPIs* service. The *APIProcedureName* variable was unassigned in some conditions.
 - Update the *CreateLogFile* service to support the new Remote Address / Execute Time column. Fix minor bug that appended a '/' when the endpoint was the same as the API Root.
 - Update the *UpdateWebAPIs* service to support the creation of a local copy of a Web API that exists in an inherited application.
 - Update the *URLRequiresAuthentication* service to support exact matching endpoints and wildcard endpoints.
 - Update the *GetResponse* and *SetResponseBody* services to auto-detect PNG, JPG, and GIF data formats.
- Changes to the [NDW_HTTP_Logs_Events](#) commuter:
 - Retrofit to use log indexes rather than the log files themselves. This speeds up the process of populating the *ReportTable*.
 - Add ability to rebuild log indexes. Modify the Action Bar so the Refresh Logs are now in the new Log Actions group.
 - Update the *EDL_SEARCH_TEXT.CHAR* event handler to avoid refreshing the list of logs if the user is backspacing in an empty control.
 - Revamp the search feature so that text searching no longer filters the list but locates the next row with the match. Add support for Next and Previous search requests.
 - Various changes to add support for a Remote Address / Execute Time column.
 - Add support to archive logs.
 - Update the *RefreshLogTable* internal gosub so the log count will report 0 instead of empty if the UDP has not yet been set.
 - Fix VNAV in the *OLE_ACTION_BAR.OnClick* when archiving logs and cancelling the CHOOSE folder dialog.
 - Update archive log feature to display a success or error message as needed.
 - Hide *ReportTable* and display Picture control with caption when archiving logs to help indicate a process is running.
 - Clear the log count indicator when the capture path is empty.
- Changes to the [NDW_HTTP_LOGS](#) form:
 - Resized to provide more real estate.
 - Added VCR *Next* and *Previous* buttons to support finding additional matches.
 - Disable the *CHAR* event handler for the search editline in favor of a *LOSTFOCUS* event handler to enable *Next* and *Previous* searches. This also allows all relevant log rows to be displayed (e.g., if a particular HTTP method is found for a request log then it will be easier to see the matching response log).
- Changes to the [Action_Setup](#) insert:
 - Add *TableVolumes@* and new Unused global commons in the */Tables/* common block. Remove dependency upon the *Locate* statement in *@Tables* to find the volume of the current table.
- Changes to the [HTTP_Framework_Setup_Equates](#) insert:
 - Add *ArchiveScriptKeyID\$*.
- New SYSENV configuration row: [SRP_HTTP_FRAMEWORK_HTTP_LOGS_ARCHIVE_SCRIPT](#). This contains a PowerShell script to facilitate archiving of HTTP logs.
- New utility form: [NDW_HTTP_LOGS_ARCHIVE_DATE](#) (with [NDW_HTTP_Logs_Archive_Date_Events](#) commuter). This provides a date prompt dialog box.
- Changes to the [NDW_HTTP_FRAMEWORK_SETUP](#) form:
 - Updated the Non-Authenticated URLs and Whitelisted IPs edit table controls to support unlimited items.
- Changes to the [NDW_HTTP_Framework_Setup_Events](#) commuter:
 - Update *UpdateSetupInfo* internal method call the *ReleaseAllHashTables* service so changes in the resources can be retrieved immediately by other services.
 - Update the *OLE_PUB_CREATE_APIS.OnClick* event handler to support prompting the user to make a copy of an inherited API.
- Changes to the [Memory_Services](#) module:
 - Update all services that support named caches so that whenever the named cache doesn't exist it will create one automatically rather than default to the primary cache.

4.0.4

- Changes to the [NDW_HTTP_FRAMEWORK_SETUP](#) form:
 - Bottom anchor the [STA_SRP_HTTP_FRAMEWORK_VERSION](#) control.
 - Bottom and right anchor the [CHB_RESOURCE_EXCLUDE_FROM_LOGGING](#) control.
- Replaced the misspelled [Oath_API](#) with [OAuth_API](#).
- Updated the [SYSENVISRP_HTTP_FRAMEWORK_RESOURCES](#) and [SYSENVISRP_HTTP_FRAMEWORK_RESOURCES*FRAMEWORKS](#) configuration rows with the new [OAuth](#) resource name.
- New service module: [HTTP_Resource_Manager_Services](#). Created to better manage interaction with the defined resources (currently in [SYSENVISRP_HTTP_FRAMEWORK_RESOURCES](#), but now easy to relocate). A lot of code refactoring and usage of caching has also been put in place to help performance.
- Changes to the [HTTP_Services](#) module:
 - Deprecate local [IsValidEndpoint](#) service. Update [RunWebAPI](#) service to use the [IsValidEndpoint](#) service from the [HTTP_Resource_Manager_Services](#) module.
 - Update the [CreateLogFile](#) service to use the new [GetResourceProperty](#) service to determine if logging is excluded for the current endpoint.
 - Deprecate the [GetEndpointPattern](#) service since it is no longer a dependency with any other services.
 - Deprecate the [SetSupportedEndpoints](#) service since it is no longer a dependency with any other services.
 - Update the [UpdateWebAPIs](#) service to use the [GetResourceProperty](#) service to get the supported HTTP methods and also to use the [GetResourceSignature](#) service to build the list of API signatures.
 - Update the [CreateLogFile](#) service to parse the [Get_Status](#) error better.
- Changes to the [APIRoot_API](#) module:
 - Retrofit [APIROOT.GET](#) service to use the [HTTP_Resource_Manager_Services](#) module.
- New utility form: [NDW_HTTP_LOGS](#) (with [NDW_HTTP_Logs_Events](#) commuter). Created to help manage the logs created by the [CreateLogFile](#) service.
- New utility form: [NDW_HTTP_DATEPICKER](#) (with [NDW_HTTP_DatePicker_Events](#) commuter). Created to provide datepicker capability to edit line controls via the SRP Subclass control.

4.0.3

- Changes to the [HTTP_Services](#) module:
 - Update the [SetResponseError](#) service to use "detail" instead of "Detail".
 - Update the [GetColumnValues](#) service so [Error_Services](#) is called after the [SetResponseError](#) call. This prevents [Error_Services](#) from being cleared prematurely.
 - Update the [GetColumnNames](#) service so [Error_Services](#) is called after the [SetResponseError](#) call. This prevents [Error_Services](#) from being cleared prematurely.
 - Update the [GetMVGroupNames](#) service so [Error_Services](#) is called after the [SetResponseError](#) call. This prevents [Error_Services](#) from being cleared prematurely.
 - Remove large blocks of code from the [RunWebAPI](#) service and convert these into new services: [GetEndpoint](#), [IsValidEndpoint](#), [SetSupportedEndpoints](#), and [GetEndpointPattern](#).
 - Update the [CreateLogFile](#) service to confirm if the endpoint resource should be excluded from being logged.
 - Update the [GetHomeURL](#) service to use the [GetHTTPServerName](#) service first and then rely upon the [HTTP_FRAMEWORK_SETUP_HOME_URL](#) value.
- Changes to the [Contacts_API](#) module:
 - Update [contacts.ID.GET](#) API by removing unnecessary call to the [GetDatabaseItem](#) service.
- Changes to the [NDW_HTTP_Framework_Setup_Events](#) commuter:
 - Replace calls to [GetLocalAppKey](#) gosub with calls to [GetLocalAppKeyID](#) service.
 - Add support for resource endpoints to be excluded from logging.
 - Display the SRP HTTP Framework version.
 - Update the Home URL help in the [DisplayInfoHelp](#) service.
- New API Module: [Ping_API](#).
- Changes to the [HTTP_Authentication_Services](#) module:
 - Update the [ValidateWebAccountPassword](#) service to reset the invalid password attempt counter for an account if a valid password is passed in.

4.0.2

- Changes to the [Database_Services](#) module:
 - Update the [CalculateColumn](#) service so that the [TableName](#) variable is initialized to prevent potential VNAV errors.
- Changes to the [HTTP_Services](#) module:
 - Update all [GetHTTPValue](#) services to support a [DecodePercentString](#) flag that will be used to automatically call the [DecodePercentString](#) service before returning the HTTP value.
- Changes to the [HTTP_Resource_Services](#) module:
 - Update the [AddEmbeddedResources](#) service to support a new [Singular](#) argument. This provides support for an embedded resource that is unique and should be represented as sub-properties rather than sub-resources.
 - Update the [AddSubProperty](#) service to correctly handle the [SubPropertyValue](#) argument if it contains an object handle.
 - Rename the [GetLinkRelationship](#) service to [GetLinkRelation](#). Rename the [GetLinkRelationships](#) service to [GetLinkRelations](#).
- Changes to the [APIRoot_API](#) module:
 - Replace all references to [AddLinkRelationship](#) with [AddLinkRelation](#).
- Changes to the [Webaccounts_API](#) module:
 - Replace all references to [AddLinkRelationships](#) with [AddLinkRelations](#).
- Changes to the [Contacts_API](#) module:
 - Replace all references to [AddLinkRelationships](#) with [AddLinkRelations](#).

4.0.1

- Various API routines were updated to use the *FullEndpointURLNoQuery* variable instead of the *FullEndpointURL*. This way specific services won't accidentally include potential query params when construction new URLs based on the base endpoint.
- Changes to the **APIRoot_API** module:
 - Only include the *resetPassword* form action authentication is enabled.
 - Update the *APIROOT.GET* API to verify the sub-resource has at least one HTTP method before listing it in the response.
- Changes to the **HTTP_Resource_Services** module:
 - Update the *UpdateDatabaseRow* gosub to set the *Content-Location* header with the new URL if the database row is new. According to [the specification regarding 201 responses](#) this should be the *Location* header.
- Changes to the **HTTP_Services** module:
 - Update the *UpdateDecodePercentString* service handle the left quotation marks.
 - Update the *CreateLogFile* service to include a UTC date/time stamp in the Response log header.

4.0.0

- Changes to the **HTTP_Resource_Services** module:
 - Fix *GetColumnNames* to properly remove XREF columns.
 - Add *GetObjects* service.
 - Add *GetSerializedResource* service.
 - Add *ParseResource* service.
 - Add *AddLinkRelationships* service.
 - Add *AddProperties* service.
 - Add *AddEmbeddedResources* service.
 - Add *AddNestedProperties* service.
 - Update *GetDatabaseItem* to use the new resource services.
 - Update *GetDatabaseItems* to use the new resource services.
 - Add *AddFormAction* service.
 - Update *GetColumnValues* service so when a Key ID is missing it will set [Error_Services](#) and set the response status to 404.
 - Add support for multiple nested objects in the *AddNestedProperties* service.
 - Update *GetObjects* so that specific Key ID parts can be identified to be used in the self relationship URL and also add feature so the default "*" delimiter can be swapped out for another character.
 - Fix bug *AddNestedProperties* when using Array formatting.
 - Add *IsArray* argument for the *AddProperties* service so data can be automatically formatted as an array regardless if @VMs are found. This is meant to maintain formatting integrity of the property regardless of 0, 1, or multiple values.
 - Add *GetObject* service. Refactored *GetObjects* service to use *GetObject* service.
 - Add *AddProperty* service. Update *AddProperties* service to call *AddProperty* for each property.
 - Add *AddSubProperty* and *AddSubProperties* service.
 - Add *AddSubResource* and *AddSubResources* service.
 - Add *AddSubResourceObject* and *AddSubResourceObjects* service.
 - Remove *AddNestedProperties* service. Refit other services to use *AddSubResources*.
 - Add *AddLinkRelationship* service. Update *AddLinkRelationships* service to call *AddLinkRelationship* for each relationship.
 - Update all resource related services to use new services and remove direct calls to [SRP_JSON](#) except for the lowest level services.
 - Add *AllowKeyProperty* argument to the *GetObject*, *GetObjects*, and *GetColumnNames* services to override the default behavior of removing full Key ID columns from being represented in the object. This is useful for sub-resources.
 - Fix bug in *GetObject* service where associated property names were not being removed if the column names were removed by the *GetColumnNames* service.
 - Update the *GetDatabaseItem* and *GetDatabaseItems* service so the *SelfURL* argument is now optional.
- Changes to **HTTP_Framework_Setup_Equates**:
 - Add *HTTP_FRAMEWORK_SETUP_WHITELISTED_IPS\$*.
 - Add *HTTP_FRAMEWORK_SETUP_ENABLE_HTTP_BASIC_AUTHENTICATION\$*
 - Add *HTTP_FRAMEWORK_SETUP_NEW_PASSWORD_TIME_TO_LIVES\$*
 - Add *HTTP_FRAMEWORK_SETUP_OLD_PASSWORD_TIME_TO_LIVES\$*
 - Add *HTTP_FRAMEWORK_SETUP_INVALID_PASSWORD_LIMIT\$*
 - Add *HTTP_FRAMEWORK_SETUP_CONTAINMENT_ACTION\$*
- Changes to the **NDW_HTTP_Framework_Setup** form:
 - Add controls to support Whitelisted IPs.
 - Major design overhaul:
 - Used a design layout similar to the Replication Manager, which is based on Microsoft Office Options dialog.
 - Add SRP ActiveX controls and multiple pages.
 - Move various setup controls onto different pages to suit the organizational layout.
 - Add HTTP Basic Authentication configuration controls.
 - Add Info buttons and tooltips for all fields.
- Changes to the **NDW_HTTP_Framework_Setup_Events** commuter:
 - Add support for Whitelisted IPs.
 - Insert empty row if edit table controls are created empty. This allows a new item to be entered.
 - Major code changes to support the design overhaul of the form.
 - Add Server Enabled checkbox and associated logic.
 - Add TIMER event handler to dynamically update the Server Enabled checkbox.
 - Retrofit code to use [Database_Services](#) and [Error_Services](#).
- Changes to the **HTTP_Services** module:
 - Add the *GetWhitelistedIPs* and *IPsPermitted* services.
 - Replace *Xlate* with *ReadDataRow* for all services referencing *SetupTable\$*
 - Update *GetHomeURL* service to automatically prepend HTTP or HTTPS based on the request if this is not already specified in the user defined Home URL setting.
 - Update *GetNonAuthenticatedURLs* service to automatically prepend the API URL if this is not already specified in the user defined setting.
 - Add the *GetEnableHTTPBasicAuthenticationFlag* service.

- Add the *GetNewPasswordTimeToLive* service.
- Add the *GetOldPasswordTimeToLive* service.
- Add the *GetInvalidPasswordLimit* service.
- Add the *GetContainmentAction* service.
- Add the *GetServerEnabled* service.
- Add the *SetServerEnabled* service.
- Changes to the **HTTP_Authentication_Services** module:
 - Add support for checking for whitelisted IPs in the *AuthenticateRequest* service.
 - Add *GetWebAccountPassword*, *SetWebAccountPassword*, and *ValidateWebAccountPassword* services.
 - Update the *AuthenticateRequest* service to use the *ValidateWebAccountPassword* service rather than relying upon a hardcoded *USERS* table.
 - Update *NewPasswordTimeToLive\$* equate to use the *GetNewPasswordTimeToLive* service rather than the hardcoded value.
 - Update *OldPasswordTimeToLive\$* equate to use the *GetOldPasswordTimeToLive* service rather than the hardcoded value.
- New table: **WEB_ACCOUNTS** to provide built-in support for authentication.
- New insert: **Web_Accounts_Equates**.
- New table commuter: **Web_Accounts_Actions**.
- New utility form: **NDW_WEB_ACCOUNTS** (with **NDW_Web_Accounts_Events** commuter).
- New service module: **WebAccounts_Services**.
- New HTTP service: **HTTP_WEBACCOUNTS_SERVICES**.
- New insert: **Action_Setup** (taken from SRP FrameWorks).
- New service module: **Database_Services** (taken from SRP FrameWorks).
- Added **RTI_LH_INFO_EQUATES** (taken from the UD Manager).
- Changes to **HTTP_ENTRY_POINT_SERVICES**:
 - Add *webaccounts* to the list of allowed services.
- New SYSENV configuration row: **SRP_HTTP_FRAMEWORK_SERVER_ENABLED**.
- Changes to the **HTTP_MCP** controller:
 - Add support for the *GetServerEnabled* service. Set status to 503 is server is not enabled.
- New Images
 - SRPHTTPINFO (*BMPS\SRPHTTPInfo.png*)
 - SRPHTTPTREECOLLAPSED (*BMPS\SRPHTTPTreeCollapsed.png*)
 - SRPHTTPINFOTREEEXPANDED (*BMPS\SRPHTTPTreeExpanded.png*)
- Changes to the **HTTPClient_Services** module:
 - Update *SendHTTPRequest* service to support client-side certificates.

3.0.4

- Changes to the **HTTPClient_Services** module:
 - Update the *SendHTTPRequest* service to check for content in the *HeaderList* variable before calling the *For Each* loop. (*Bug Fix*)
- Changes to the **HTTP_Contacts_Services** web service:
 - Fix minor typo in the *NextSegment* variable in the *GetItem* method. (*Bug Fix*)
- Changes to the **HTTP_Resource_Services** module:
 - Update the *PostDatabaseItem*, *PutDatabaseItem*, and *PatchDatabaseItem* services to support a new argument, *AllowedColumnNames*, which will be used to filter out column names which are submitted in the payload but should not be updated on the server. (*Enhancement*)

3.0.3

- Changes to the **HTTP_Services** module:
 - Update the *GetEntryPointService* service to support the name of a fully qualified web service. For example, the **HTTP Framework Setup** prompt for Entry Point can contain *entry_point* or *http_entry_point_services* (case-insensitive).

3.0.2

- Service metadata added so the SRP Editor can use this without requirement all services to be recompiled first.

3.0.1

- All services have been refactored to use Enhanced BASIC+ syntax.
- All web services have been refactored to be easier to setup.
- Changes to the **HTTP_Services** module:
 - Add the *SetSessionID* service.
 - Add the *GetSessionID* service.
 - Add the *SetOECGIProcErr* service.
 - Add the *GetOECGIProcErr* service.
 - Add the *GetAbortedService* service.
 - Add the *GetDebuggerSetting* service.
 - Add the *GetDebuggerService* service.
 - Add the *GetAbortedService* service.
 - Add the *GetEnableLoggingFlag* service.
 - Add the *CreateLogFile* service. The format for the Request logs has been significantly updated. Each attribute of the Request array is now labelled to make it easier to identify the meaning of each value. Also, data coming from the *Registry Settings* and *Additional Values* attributes is displayed in a list and labelled accordingly.
 - Add the *SetHTTPxxxx* services.
 - Update the *SetRequestHeaderFields* service to use the Registry information from the *GetHTTPRegistrySettings* service rather than using the *SRP_Registry* function.

- Add the [GetLogErrorsOnlyFlag](#) service.
- Changes to the [HTTP_MCP](#) controller:
 - Remove logging logic and call the new [CreateLogFile](#) service instead.
 - Remove logic to handle *ProcErr* situations and call the new [GetAbortedService](#).
 - Change the debugger setting mode and debugger intercept routine based on the setup values.
- Changes to the [HTTP_Entry_Point_Services](#) web service:
 - Update to simplify the way the JSON menu is built.
 - Update to only provide access to the Contacts and Version web services.
- Changes to the [HTTP_Contacts_Services](#) web service:
 - Update to support all CRUD operations.
 - Update to connect to the sample CONTACTS database table which is now included.
- Changes to the [HTTP_Resource_Services](#) module:
 - Add the [PutDatabaseItem](#) service.
 - Add the [PatchDatabaseItem](#) service.
 - Update [PostDatabaseItem](#) service to only create new resources. This makes this service conform to the HTTP standards.
- Changes to [HTTP_Framework_Setup_Equates](#):
 - Add [HTTP_FRAMEWORK_SETUP_ABORTED_SERVICES\\$](#).
 - Add [HTTP_FRAMEWORK_SETUP_ENABLE_LOGGING\\$](#).
 - Add [HTTP_FRAMEWORK_SETUP_DEBUGGER_SETTING\\$](#).
 - Add [HTTP_FRAMEWORK_SETUP_DEBUGGER_INTERCEPT\\$](#).
 - Add [HTTP_FRAMEWORK_SETUP_LOG_ERRORS_ONLY\\$](#).
- Added the following configuration options to [SRP_HTTP_FRAMEWORK_SETUP](#):
 - *Aborted Service*
 - *Enable Logging Flag*
 - *Debugger Setting*
 - *Debugger Intercept*
 - *Log Errors Only Flag*
- Update [NDW_HTTP_FRAMEWORK_SETUP](#) to support the *Aborted Service*, *Enable Logging Flag*, *Debugger Setting*, *Debugger Intercept*, and *Log Errors Only Flag* values.
- New application service module: [HTTP_Aborted_Service](#). This is a default service to handle aborted HTTP Requests. This is similar to [INET_ABORTED](#) for traditional [INET/O4W](#) web applications.
- New application service module: [HTTP_Debugger_Service](#). This is a default service to handle runtime errors during HTTP Requests. This uses the [RTI_DEBUG_COMMON](#) insert to get the state of the debugger.
- New web service: [HTTP_Version_Services](#). This service returns the current version of the SRP HTTP Framework product. It is used by the revamped [HTTP_Entry_Point_Services](#).
- New sample database: As noted in the change log for [HTTP_Contacts_Services](#) above, there is now a sample CONTACTS database table included. This is a small (300 row) table with indexes that is designed to help install and test the SRP HTTP Framework very quickly.

3.0.0

- New form: [NDW_HTTP_FRAMEWORK_SETUP](#) and an associated event commuter module. This provides a visual interface for configuring the setup values in [SRP_HTTP_FRAMEWORK_SETUP](#).
- Added the following configuration option to [SRP_HTTP_FRAMEWORK_SETUP](#):
 - *Non-Authenticated URLs*
- Changes to the [HTTP_Services](#) module:
 - Add the [GetNonAuthenticatedURLs](#) service.
 - Add the [URLRequiresAuthentication](#) service.
 - Update the [DecodePercentString](#) service to convert %09, %0A, and %0D properly.
 - Update the [SetQueryField](#) service to only require the Name argument to be populated.
- Changes to the [HTTP_Resource_Services](#) module:
 - Refactor the [GetColumnNames](#) service and resolve a bug where non-master data type columns would be returned.
 - Update the [PostDatabaseItem](#) service to set the response status to 201 when the ItemID is being passed in but it does not yet exist in the database.
- Changes to the [HTTP_MCP](#) controller:
 - Add support for *ProcErr* argument. Create a generic error response.
 - Add code to track API execution time using [SRP_Stopwatch](#). Display the time in the Response log that is written into the debug folder.
- Changes to the [HTTP_Authentication_Services](#) module:
 - Update the [AuthenticateRequest](#) service to verify authentication requirements of the current URL using the [URLRequiresAuthentication](#) service.

2.1.0

- New application service module: [HTTPClient_Services](#). Provides robust services for web services to make requests to other web servers.
- Add the following configuration option to [SRP_HTTP_FRAMEWORK_SETUP](#):
 - *Flush Cache Flag*
- Add the following services to the [HTTP_Services](#) module:
 - [GetFlushCacheFlag](#)
 - [GetBestContentNegotiation](#)
- Update the [ClearSettings](#) service to check the [GetFlushCacheFlag](#) service before calling the [Flush](#) and [GarbageCollect](#) statements. The purpose is to allow code web service code to always be refreshed without needing to restart the [OEngineServer](#).
- Add [GetMVGroupNames](#) service to [HTTP_Resource_Services](#) so that associated multivalue column groups can be applied to JSON objects.
- Update [GetDatabaseItem](#) and [GetDatabaseItems](#) services in [HTTP_Resource_Services](#) to use the [GetMVGroupNames](#) service for any associated multivalue columns that have been defined this way.
- Update [SetHALItem](#) and [SetHALCollectionEmbedded](#) services in [HTTP_JSON_Services](#) to support embedded objects that contain associated multivalue column information.

- Update *PostDatabaseItem* service in [HTTP_Resource_Services](#) so all of the *GETVALUE* services specify an empty string in the *Default* argument. This allows empty column values to maintain a JSON *null* rather than convert it to an empty string.
- Update *PostDatabaseItem* service in [HTTP_Resource_Services](#) to rely upon %RECORDS% (if one exists) if there is no %SK%. This is an alternative way to quickly calculate the next available Key ID for the new database row being posted.
- Update *GetDatabaseItems* service in [HTTP_Resource_Services](#) to rely upon %RECORDS% (if one exists) if there is no filter specified. This is an alternative way to quickly get a sorted list of Key IDs for the database rows being retrieved.

2.0.1

- Fix bug in *SetResponseHeaderField* service that prevented header values from being saved.
- Improve the *GetFullEndPointURL* service so that end points which are also the same as the API URL do not display a "/" at the end.

2.0.0

- Major changes to improve the way RESTful web services process each segment in the URL:
 - Changes to the [HTTP_Services](#) module:
 - Update the *GetResponse* service to use the *GetResponseStatus* service to populate the response body if there is no body already generated by a service.
 - Add *GetFullEndPointURL* service to provide a way of getting the URL sent by the client.
 - Update argument signatures for the *RunHTTPService* to be simpler and more intuitive.
 - Refactor the [HTTP_Service_Setup](#) insert to be much cleaner and with fewer lines of code.
- Add support for standard and developer customized HTTP response status codes:
 - Create new configuration record in the SYSENV table: [SRP_HTTP_FRAMEWORK_HTTP_STATUS_CODES](#).
 - Update the *GetResponseStatus* service in the [HTTP_Services](#) module to use the [SRP_HTTP_FRAMEWORK_HTTP_STATUS_CODES](#) configuration record.
- Add the *Entry Point Service* configuration option to [SRP_HTTP_FRAMEWORK_SETUP](#).
- Add *GetEntryPointService* to the [HTTP_MCP](#) controller.
- Refactor various core routines to work with the previous changes:
 - [HTTP_Entry_Point_Services](#)
 - [HTTP_Users_Services](#)
 - [HTTP_Contacts_Services](#)

1.0.2

- Add the following configuration options to [SRP_HTTP_FRAMEWORK_SETUP](#):
 - *Enable Authentication Flag*
 - *Realm Value*
- Add the following services to the [HTTP_Services](#) module:
 - *GetHomeURL*
 - *GetAPIRootURL*
 - *GetCapturePath*
 - *GetEnableAuthenticationFlag*
 - *GetRealmValue*
- Update the [HTTP_Authentication_Services](#) helper to use the *GetEnableAuthenticationFlag* and *GetRealmValue* services. These services replaced hard-coded values.
- Update the [HTTP_MCP](#) controller to use the *GetCapturePath* service. This replaced the *Xlate*.
- Update the [HTTP_Service_Setup](#) insert to use the *GetHomeURL* and *GetAPIRootURL* services. These services replaced *Xlated* values.

1.0.1

- Create two configuration records in the SYSENV table:
 - [SRP_HTTP_FRAMEWORK_VERSION](#) - Stores the current version and build of the SRP HTTP Framework product.
 - [SRP_HTTP_FRAMEWORK_SETUP](#) - Stores the *Home URL*, *API URL*, and *Capture Path* information.
- Update the [HTTP_Service_Setup](#) insert to anticipate OECGI requests wherein the *Script Name* URL also exists within the *Path Info* URL (e.g., Microsoft IIS). This fixes a problem wherein the wrong service was being identified, especially in the Entry Point Service.
- Update the [HTTP_Service_Setup](#) insert to assign the *HomeURL\$* and *APIURL\$* equates with the values stored in the [SRP_HTTP_FRAMEWORK_SETUP](#) record rather than being hard-coded. This eliminates the need to recompile HTTP service modules whenever the URL paths are changed.
- Update the [HTTP_Services](#) module by adding a new service called *GetVersion*. This returns the information stored in the [SRP_HTTP_FRAMEWORK_VERSION](#) record.
- Update the [HTTP_MCP](#) controller to use the *capture path* stored in the [SRP_HTTP_FRAMEWORK_SETUP](#) record. This eliminates the need to update the hard-coded path in [HTTP_MCP](#) and recompile.

1.0.0

- Initial release of the stand-alone product.