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| Gray Quarter, Inc. |  |

Release Notes

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| Master Script Upgrade Release Notes | http://www2.leoncountyfl.gov/coadmin/pio/logos/leoncounty_CMYK.jpg |

# Document Control

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| --- | --- | --- | --- |
| Date | Author | Version | Changes |
| 01/02/2019 | John Schomp | 0.5 | DRAFT |
| 01/31/2019 | John Schomp | 1.0 | Initial version |
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# Leon County Master Script Upgrade

## Summary

Gray Quarter, Inc. has upgraded the agency scripts extracted from the LEONCO Production environment from the version 1.x and 2.x format to the newest scripting version 3.0 format. The original scripts that were stored in standard choices have been migrated into JavaScript files, using the Accela best practice directory structure. These standard choices have been converted to a structure that mirrors the record type structure for the agency. This document describes the details of the conversion, as well as implementation steps.

## Analysis

A review of the scripting shows that customary standards for scripting based on version 2.X have been used. Variable branching was used, and the script migration follows the branching framework when possible. Several opportunities for code review and/or refactoring were identified. Please see the Recommendations section for details.

## Master Script Usage

The following events are in use for the LEONCO Production agency, shown with associated master scripts. The “Action” column describes the changes that will be required when implementing the upgraded scripts.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event | Script | Productized | Version | Action |
| ApplicationDetailNewBefore |  | N/A | N/A | Disable Event |
| ApplicationStatusUpdateAfter | ApplicationStatusUpdateAfter | No | 2.0 | Use Productized 3.0 |
| ApplicationSubmitAfter | ApplicationSubmitAfterModified | No | 2.0 | Use Productized 3.0 |
| ApplicationSubmitBefore | ApplicationSubmitBefore | No | 2.0 | Use Productized 3.0 |
| CAEConditionAddAfter | CAEConditionAddAfter | No | 2.0 | Use Productized 3.0 |
| ContactLookUpAfter |  | N/A |  | Disable Event |
| ConvertToRealCAPAfter | ConvertToRealCapAfter2.0 | No | 2.0 | Use Productized 3.0 |
| FeeEstimateAfter4ACA | FeeEstimateAfter4ACA | No | 2.0 | Use Productized 3.0 |
| LicProfAddAfter |  | N/A |  | Disable Event |
| LicProfUpdateAfter | LICPROFUPDATEAFTER | No | 2.0 | Use Productized 3.0 |
| PaymentReceiveAfter | PaymentReceiveAfterV2.0 | No | 2.0 | Use Productized 3.0 |
| RefLicProfAddAfter | RefLicProfAddAfter | No | 2.0 | Use Productized 3.0 |
| RefLicProfUpdateAfter | RefLicProfUpdateAfter | No | 2.0 | Use Productized 3.0 |
| VoidFeeAfter | VoidFeeAfter | No | 2.0 | Do not modify, not a master script |
| WorkflowTaskUpdateAfter | WorkflowTaskUpdateAfterV2.0 | No | 2.0 | Use Productized 3.0 |
| WorkflowTaskUpdateBefore | WorkflowTaskUpdateBeforeV2.0 | No | 2.0 | Use Productized 3.0 |
| ApplicationDetailUpdateAfter | UniversalMasterScript (Master Script - 7.3.0.0) | Yes | 2.0 | Use Productized 3.0 |
| ApplicationSpecificInfoUpdateAfter | ApplicationSpecificInfoUpdateAfter (Master Script - 7.3.3.5.0) | Yes | 2.0 | Use Productized 3.0 |
| ApplicationSpecificInfoUpdateBefore | ApplicationSpecificInfoUpdateBefore (Master Script - 7.3.3.5.0) | Yes | 2.0 | Use Productized 3.0 |
| ApplicationStatusUpdateBefore | ApplicationStatusUpdateBefore (Master Script - 8.0.0.0.0) | Yes | 2.0 | Use Productized 3.0 |
| ContactAddAfter | ContactAddAfter (Master Script - 7.2.0) | Yes | 2.0 | Use Productized 3.0 |
| ContactEditAfter | ContactEditAfter (Master Script - 7.2.0) | Yes | 2.0 | Use Productized 3.0 |
| InspectionMultipleScheduleAfter | InspectionMultipleScheduleAfter (Master Script - 7.3.1.2) | Yes | 2.0 | Use Productized 3.0 |
| InspectionMultipleScheduleBefore | InspectionMultipleScheduleBefore (Master Script - 9.0.3) | Yes | 3.0 | Use Productized 3.0 |
| InspectionResultSubmitAfter | InspectionResultSubmitAfter (Master Script - 7.3.3.5.0) | Yes | 2.0 | Use Productized 3.0 |
| InspectionResultSubmitBefore | InspectionResultSubmitBefore (Master Script - 9.0.3) | Yes | 3.0 | Use Productized 3.0 |
| InspectionScheduleAfter | InspectionScheduleAfter (Master Script - 7.2.0) | Yes | 2.0 | Use Productized 3.0 |
| InspectionScheduleBefore | InspectionScheduleBefore (Master Script - 9.0.3) | Yes | 3.0 | Use Productized 3.0 |
| LicProfLookUpSubmitBefore | LicProfLookupSubmitBefore (Master Script - 7.3.3.0) | Yes | 2.0 | Use Productized 3.0 |
| V360InspectionResultSubmitAfter | V360InspectionResultSubmitAfter (Master Script - 7.2.0) | Yes | 2.0 | Use Productized 3.0 |
| V360InspectionResultSubmitBefore | InspectionResultSubmitBefore (Master Script - 9.0.3) | Yes | 3.0 | Use Productized 3.0 |

## Edits to Standard Master Scripts

* ApplicationStatusUpdateAfter was modified to work like a productized script (using productized include files)
* ApplicationSubmitAfter was modified to contain licensed professional interface code which has been extracted
* CAEConditionAddAfter was modified to contain LP condition code which has been extracted
* RefLicProfAddAfter was modified to contain LP code which has been extracted

## Custom functions that conflict with Master Script distribution

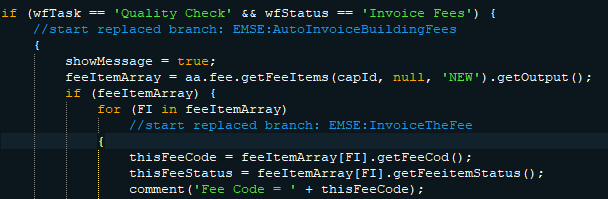
|  |  |
| --- | --- |
| Function | Action |
| addFee.js | Custom message, retain |
| addParameter.js | Remove |
| closeCap.js | Remove |
| convertContactAddressModelArr.js | Remove |
| convertDate.js | Remove |
| createRefContactsFromCapContactsAndLink.js | Remove |
| createRefLicProf.js | Remove |
| describe.js | Remove |
| describeObject.js | Remove |
| editRefParcelAttribute.js | Remove |
| generateReport.js | Custom, retain |
| getACARecordParam4Notification.js | Custom, retain |
| getACARecordURL.js | Custom, retain |
| getConditions.js | Remove |
| getContactByType.js | Remove |
| getContactParams4Notification.js | Remove |
| getParcelConditions.js | Remove |
| getPeople.js | Custom message, retain |
| getUserEmail.js | Remove |
| getWorkflowParams4Notification.js | Remove |
| handleError.js | Remove |
| include.js | Remove |
| inspCancelAll.js | Custom, retain |
| lookup.js | Remove |
| resultWorkflowTask.js | Custom logging, retain |
| sendNotification.js | Remove |
| updateFeeItemInvoiceFlag.js | Remove |

## Functions with multiple versions

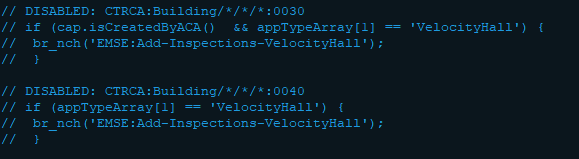
* getFees\_Inspections\_Building.js has a difference in logic and needs review.
* sendLPExpiredNotification.js has a minor difference in email message, should be reviewed.

## Standard Choice Conversion Details

* Approximately 2012 Standard Choices containing scripts have been converted to 92 script files. 17 new functions were created.
* All converted scripts have been tested for proper JavaScript syntax.
* To assist with testing, the original “*Branch*” standard choice names have been added as comments to the converted scripts. Once testing is complete these comments won’t be needed. For example:



* The conversion algorithm may have created some instances where double sets of braces {{ … }} denote a code block. These can be removed if desired, but they have no impact on the script execution.
* In accordance with best practices, all references to *showDebug* within business scripts have been removed to simplify script debugging. Accela recommends setting this in one place, preferably using INCLUDES\_CUSTOM\_GLOBALS, which was designed for this purpose.
* Individual standard choices that were disabled are included but commented out inline. Any branch calls in this disabled code were migrated as “*br\_nch*” as the branch function is no longer supported in 3.0. If this code needs to be enabled, these branch calls would have to be refactored. For example:



* Standard choice branches that were not referenced by any script were converted into JavaScript and placed into the Scripts\Unused folder. This includes any code that was referenced by disabled standard choices. These should be reviewed.
* All script files have been formatted to JavaScript standards for indentation.
* The caret (^) is no longer valid for creating conditional logic. Standard JavaScript should be used instead (i.e., if, else, else if, switch)
* All references to Custom Fields, Task Specific Info, and Parcel Attributes that used braces (e.g., *{ASI Field})* have been changed to use the AInfo global Array (e.g., *AInfo[‘ASI Field’]*). Braces are now exclusively used to designate blocks of code.
* All references to the “*branch*” and “*endbranch*” functions have been removed. These are deprecated in Master Scripts 3.0.

## Code Analysis and Recommendations

* Review/Edit all TODO sections as shown below:

|  |  |
| --- | --- |
| INCLUDES\_CUSTOM\getTlcResponse | TODO: send email because of error |
| INCLUDES\_CUSTOM\utilityReleases.js | TODO: strange characters in extract, check standard choice |
| ASB;CODECOMPLIANCE!~!~!~.js | TODO: syntax error next line, fixed |
| ASB;DEVELOPMENTSVC!~!~!~.js | TODO: syntax error next line, fixed |
| ASUA;AMS!STORM!DRAIN!CLEANING.js | TODO: JHS 1/2/19 Consider making a function as this code is run for several record types on this event |
| IRSA;BUILDING!~!~!~.js | TODO: confirm sequence order |
| WTUA;BUILDING!~!~!~.js | TODO: there is a syntax error on this standard choice line 0410. Fixed for now. |
| getFees\_Inspections\_Building.js | Choose correct version |
| sendLPExpiredNotification.js | Choose correct version |
| addInspectionsBuilding.js, addInspections\_Building.js | There is a function as well as a standard choice to do similar tasks. Consider combining into a single routine. |
| ASUB;BUILDING!~!~!~.js | Cancel without a message to the user |
|  |  |

* There are many custom functions that have “if” statements without code blocks (curly braces) because they only have a single line statement. It’s best practice to use curly braces for readability.
* Remove any scripts for modules that are not being used, if any.

## Script Repository

A temporary repository was created for this conversion

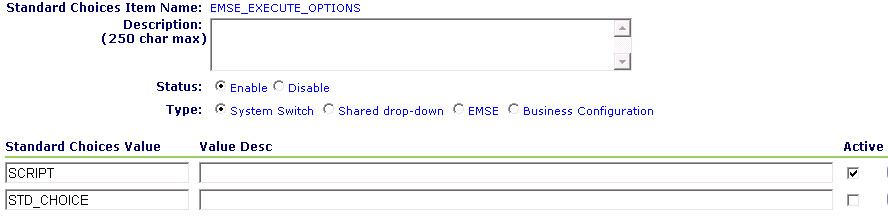
|  |  |
| --- | --- |
| Repository Site | Github.com |
| SUPP Repository URL | <https://github.com/grayquarter/LeonAccelaScripts.git/branches/SUPP> |

To connect to the repository, the “EMSEToolConfig” standard choice should be configured as per the Accela documentation. The “EMSETool” portlet should be enabled for the appropriate users/groups.

## Standard Choices

The following Standard Choices must be configured. These are documented in the Master Script distribution in the documentation folder. The “Master Script Distribution\_Std\_Choices.zip” data manager package can be used to load these values.

* EMSE\_EXECUTE\_OPTIONS determines if Scripts or Standard Choices, or both should be executed by the master script. This should be set to select Scripts only.
* EMSE\_VARIABLE\_BRANCH\_PREFIX determines the naming convention used to determine if a script is associated to a particular event.
* MASTER\_SCRIPT\_DEFAULT\_VERSION (Recommendation is to set to 8.0.1.0.0)



## Deployment to Higher Environments

After the initial migration, the deployment to a higher environment (e.g., DEV -> TEST, TEST-> PROD) can be achieved by the following steps:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Step | Description | Est. Time |
| 1 | Create rollback package | In TARGET environment create a Data Manager export package that contains:   * all Event to Script associations (AA Configuration, Event Manager, Events, select all) * Master Includes (AA Configuration, Event Manager, Master Scripts, INCLUDES\_CUSTOM) * Includes (AA Configuration, Event Manager, Master Scripts, INCLUDES\*)   Save and run the job, saving the output in a dedicated folder. This package will only be used if a roll back is required. | 5 Minutes |
| 2 | Create master script package | In SOURCE environment create a Data Manager export package that contains:   * all Event to Script associations (AA Configuration, Event Manager, Events, select all) * Includes (AA Configuration, Event Manager, Master Scripts, INCLUDES\*) * EMSE Standard Choices (AA Configuration, Standard Choices: EMSE\_EXECUTE\_OPTIONS, EMSE\_VARIABLE\_BRANCH\_PREFIX, EMSEToolConfig)   Save and run the job, saving the output in a dedicated folder. | 5 Minutes |
| 3 | Deploy master script package | In TARGET environment create a Data Manager import job that will import the entire package in step 2. | 5 Minutes |
| 4 | Confirm EMSEToolConfig | In TARGET environment update the EMSEToolConfig standard choice with credentials and URL to access the environment repository. | 2 Minutes |
| 5 | Deploy Scripts | In TARGET environment deploy all scripts using the EMSE Tool. | 5 Minutes |
| 6 | Update INCLUDES\_CUSTOM\_GLOBALS | In TARGET environment update the INCLUDES\_CUSTOM\_GLOBALS script as needed for this environment (debugging options, environment variable, etc.) | 2 Minutes |
| 7 | Smoke Test | In TARGET environment perform smoke testing to ensure proper script execution. | 10 Minutes |