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# Degree Works Release Guide

Release 5.0.0  
March 2017



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# Introduction

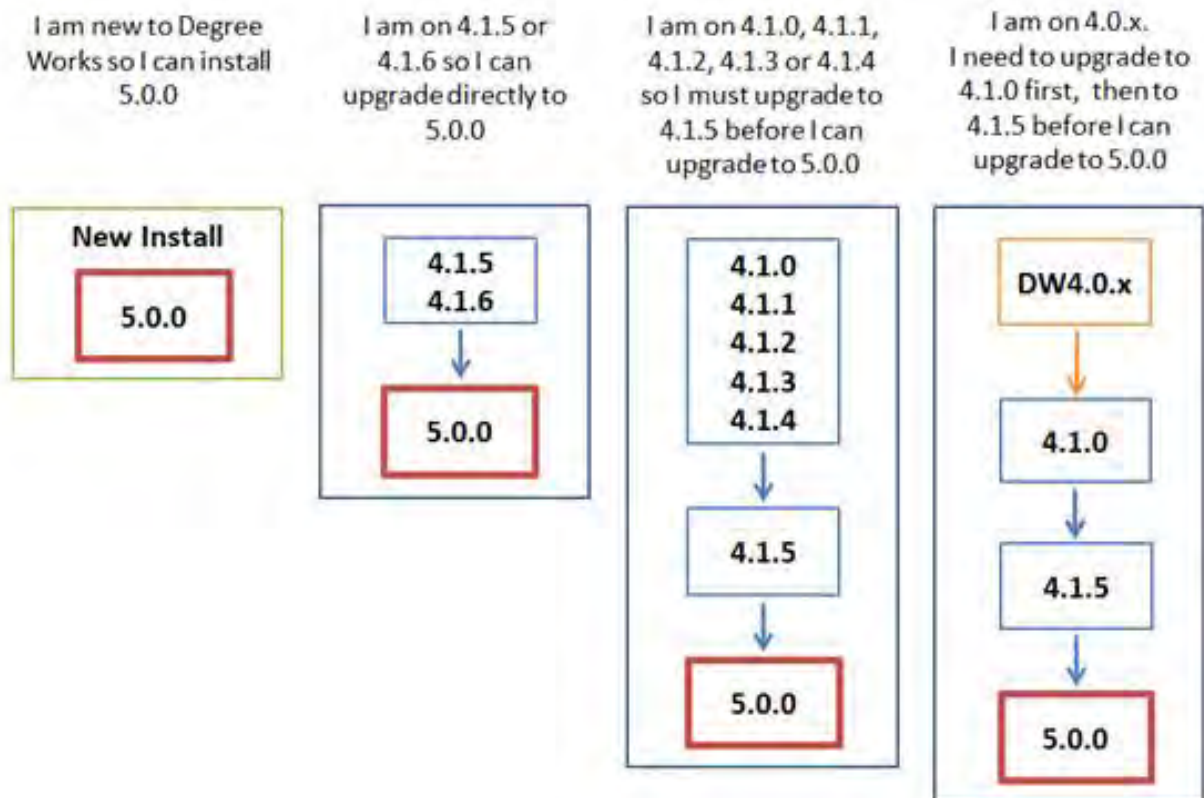
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This document discusses the Degree Works Release 5.0.0. This release was identified as BALTO on the Degree Works Roadmap.

## Upgrade Path

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The Degree Works 5.0.0 software release supports a new installation or an upgrade path for existing customers currently on release 4.1.5 or 4.1.6.



Because of the complexity of engineering upgrade pathways, we have moved to a structure of allowing forward upgrades from only two named previous versions (e.g. you must be at 4.1.5 or 4.1.6 to move forward to 5.0.0), rather than a plethora of “you can upgrade from any prior version to the newest version”. Simply put, if you get more than 2 releases behind, your upgrade path will be longer.

For more details, see the *Degree Works Installation Guide*.

# Hardware and Software Requirements

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Hardware and software requirements are located in the *Degree Works Installation Guide 5.0.0* under the section heading *New Installation Prerequisites and Instructions*.

## Release 5.0.0 Highlights

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This release is a “MAJOR” release so the version has been assigned as 5.0.0 and it will become the new baseline for Degree Works. This is a significant release in terms of the product direction – it introduces the infrastructure needed for Cloud delivery. You can expect structural changes, imbedded tool changes, and a number of both structural and functional deprecations. You should plan on the following changes at a minimum.

### Additions:

There will be a new messaging tool used internally, called RabbitMQ, that will be an imbedded component in Cloud deployment, but which will need to be configured by you as a server for on-premises deployments. This is an open source message broker application and it has no license fee associated with it (available under the Mozilla Public License scheme).

### Subtractions:

- With 5.0.0, SSB native authentication will no longer be supported, and will not work in this environment. You must move to Ellucian Identity Service (EIS), CAS or some other 3<sup>rd</sup> party application for authentication.
- With 5.0.0, CGI will no longer be supported and will not work in this environment. It was replaced in 4.1.5 by the Dashboard Servlet.
- With 5.0.0, the PC version of Scribe is no longer supported and will not work in this environment. It was replaced in 4.1.5 by a web version.
- With 5.0.0, the PC version of Surecode is no longer supported and will not work in this environment. It was replaced in 4.0.4 by a web version.
- With 5.0.0, the Adobe Flex version of Transfer Equivalency Self-Service is no longer supported and will not work in this environment. It was replaced in 4.1.6.

## ROADMAP referenced Enhancements

### Localization method

Because the shpscripts and properties files are now stored in the database, a new application tool has been introduced to help you manage your localizations to these resources. The tool is called the Composer. This means that these resources no longer require file directory access to be maintained.

### Better support of load balancing

Because shpscripts, properties, and parsed scribe blocks are now stored in the database, load balancing is better supported because these resources do not need to be replicated on separate server file systems.

### Reduce need to restart service

Changes to UCX entries are now automatically acknowledged by applications.

Changes to shpscripts are now automatically acknowledged by applications.

Changes to shp-settings are now automatically acknowledged by applications.

Restarting the classic daemons or the application servers (Tomcat, Weblogic) is not required after making changes that previously required a restart.

Additionally, the classic daemon process tree has been made simpler providing better performance. Furthermore, the classic daemons are more reliable since if they die, new ones are automatically started.

### Customer Satisfaction

There are other enhancements listed in the *Functional Enhancements* section of this Release Guide. Defect repairs have also been included with this release, and are listed in the separate *Degree Works Problem Resolutions* document provided.

## Functional Enhancements with 5.0.0

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This section highlights the functional enhancements that are delivered with the release.

### Audit

Enhancement #	Description
CR-000145842	Header qualifiers in the audit worksheet will not show as green/complete when classes are still in-progress. Instead, they will show as a blue icon.

### System

Enhancement #	Description
CR-000145862	RabbitMQ messaging middleware has been introduced to allow different applications to send messages back and forth in a decoupled manner. This simplifies processing of requests, allows for more dynamic worker allocations, and improves support for distributed servers and load balancing
CR-000145861	Classic process tree has been simplified, which will provide better performance.
CR-000145860	The applications recognize properties changes without requiring a restart process.
CR-000145859	The applications recognize shpscript changes without requiring a restart process.
CR-000145858	The applications recognize many shp-settings changes without requiring a restart process.
CR-000145857	The applications recognize many Surecode UCX changes without requiring a restart process.
CR-000145855	Parsed Scribed blocks are stored in the db which helps support load balancing.
CR-000145854	<p>New Composer UI has been created for editing shpscripts and properties files. This new tool brings the following features:</p> <ul style="list-style-type: none"><li>• Removes need to log into the server to maintain shpscripts.</li><li>• Can now turn on and off local version easily for testing and troubleshooting.</li><li>• Removes need to uncompress WAR or JAR files to get to properties files.</li><li>• Can localize subset of properties and use baseline for others.</li></ul> <p>Note that Java 8 is required for the Composer application to run.</p>

## Equivalency

Enhancement #	Description
CR-000145863	Transfer Equivalency Self-Service now supports Facebook logons.

## Web

Enhancement #	Description
CR-000145841	A Save as PDF Button has been added to the What-If Processed Audit.

## Problem Resolutions

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For comprehensive and detailed problem, impacts, and resolution information for all the defects corrected in this release, please refer to the supplemental *Degree Works Problem Resolutions* document delivered as part of the documentation suite provided for this release.

Object/Process	
Audit	16
Banner	4
CPA	1
Documentation	13
Install	2
Planner	7
Scribe	1
Security	1
Shepentry	1
System	8
Transfer Equivalency	5
Transfer Finder	2
Transit	3
Web	6
<b>TOTAL:</b>	<b>70</b>

## Technical Artifacts

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This section lists the supplemental technical information for the 5.0.0 release. These files are located in the Documentation Libraries on the Ellucian Support Center, alongside the other Degree Works 5.0.0 documentation release artifacts.

- *Degree Works Schema* file  
This text file contains the data structure for the Degree Works database tables.
- *Degree Works Manifest*  
The manifest details all of the files delivered in the 5.0.0 release.

## Special Notes

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### Learning about Known Installation or Upgrade Issues

Before you install Degree Works 5.0.0, refer to the following article on the Ellucian Support Center: (<http://www.ellucian.com/Solutions/Ellucian-Client-Support/>) for any known issues.

Degree Works 5.0.0 Upgrade/Install Master Article (Article number 000038286)

### Critical note about Scribe

In the 4.1.5 release a new version of Scribe that runs in a browser was released. With the 5.0.0 release the PC version of Scribe is no longer functional. Furthermore, the underlying database tables that supported PC Scribe have been removed. These tables are `dap_req_mst` and `dap_req_text_dtl`. Because of these changes, prior to installing the 5.0.0 update **you must have already moved your blocks to the new `dap_req_block` database table that was delivered in 4.1.5**. Additionally, in order to ensure that you do not lose any changes because of incompatibilities between releases, you must be using the new web Scribe in both production and test (where test is the environment where you plan to install the 5.0.0 release). If you choose to move forward with the 5.0.0 update while still using PC Scribe in production you will most likely lose many of your changes to your blocks.

In summary, prior to installing Degree Works 5.0.0, you must be on the new web-based Scribe and no longer using PC scribe. Be sure to checkpoint that scribe code comes up in web-based Scribe in your current environments.

### Scribe and UCX Load/Unload

Clients upgrading to 5.0.0 **must have converted from PC Scribe to the new web-based Scribe**, introduced in 4.1.5. If you apply the 5.0.0 update without converting to the web based Scribe you will lose all Scribe blocks in your updated environment. You should be using the web based Scribe in both test and production to ensure you do not lose any changes to your Scribe blocks.

As of the 4.1.6 release you can no longer use the load/unload scripts to copy data between two environments running **two different versions of Degree Works**. For example, if your test environment is on 5.0.0 and your production environment is on 4.1.6 you cannot use `dapblockload` and `dapblockunload` to copy blocks between environments. This is due to changes in the database tables in 5.0.0. Because of this you should consider doing the load/unload of blocks or UCX or other data **before you start the 5.0.0 upgrade**.

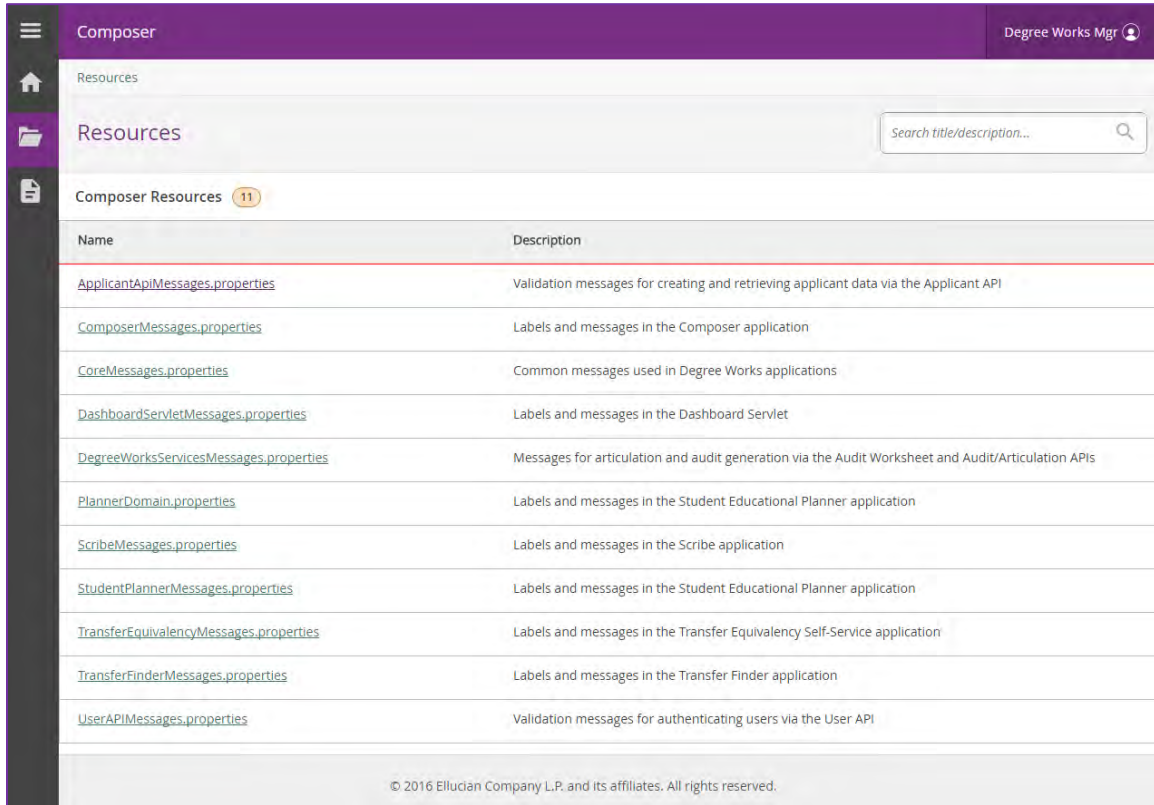
## RabbitMQ

The RabbitMQ messaging system is now required for Degree Works. The RabbitMQ Client must be installed on the Degree Works Classic server and the RabbitMQ Server component can be installed on an existing server or a new one. Refer to the *Degree Works RabbitMQ Installation Guide* for installation instructions. **Do not proceed to the update until RabbitMQ Server and Rabbit client software has been installed.**

# Screenshots

So that you can anticipate the new look of the applications, here are a few screenshots of the new user interfaces delivered in this release:

## Composer – Resources Select page



## Composer – Resources Editor page

The screenshot displays the 'Composer Resources Editor' interface. The top navigation bar includes the 'Composer' logo and a user profile 'Degree Works Mgr'. The breadcrumb trail shows 'Resources > Editor'. The main heading is 'Labels and messages in the Composer application' with the file path 'ComposerMessages.properties'. Below this, there are tabs for 'Editor' and 'Details'. The interface is split into two panes: 'Baseline Resource' and 'Localized Resource'. The 'Baseline Resource' pane contains a list of 24 numbered entries, each with a key and a value. The 'Localized Resource' pane is currently empty, with a 'Disabled' toggle and 'Copy' and 'Save' buttons. A dropdown menu at the bottom of the localized resource pane is set to 'Default'. The footer of the page contains the copyright notice: '© 2016 Ellucian Company L.P. and its affiliates. All rights reserved.'

Composer Resources Editor

Degree Works Mgr

Resources > Editor

### Labels and messages in the Composer application

ComposerMessages.properties

Editor Details

#### Baseline Resource

```
1 # $Id: //Tuxedo//ATN/Product/services/Composer/src/main/resources/locale/ComposerMessage
2 # Copyright 2016 Ellucian Company L.P. and its affiliates.
3 composer.title=Composer
4 composer.header=Composer
5 composer.signOut=Sign Out
6 composer.help=Help
7 composer.footer=# 2016 Ellucian Company L.P. and its affiliates. All rights reserved.
8 composer.navigation.title=Navigation Menu
9 composer.navigation.link=Open navigation menu
10
11 composer.navigation.breadcrumb.scripts=Scripts
12 composer.navigation.breadcrumb.resources=Resources
13 composer.navigation.breadcrumb.script.editor=Editor
14 composer.navigation.breadcrumb.resource.editor=Editor
15 composer.navigation.link.home=Home
16 composer.navigation.link.resources=Resources
17 composer.navigation.link.scripts=Scripts
18
19 composer.notification.localizationDisabled.scripts=Localization of Scripts will not take
20 composer.notification.localizationDisabled.properties=Localization of Internationalizati
21
22 composer.notification.unexpectedError=Server may not be available. Please refresh and tr
23 composer.notification.unsavedChanges=you are navigating away or your session has expired
24 composer.notification.localization.notFound=An existing record for this locale could not
25
26 composer.welcomePage.header=Welcome to Composer
27 composer.welcomePage.links=Scripts
28 composer.welcomePage.linksResources=Resources
29 composer.welcomePage.linksScripts.description=Modify SHP scripts to customize Degree work
30 composer.welcomePage.linksResources.description=Localize Java application resources such i
31
32 composer.listPage.title=Scripts
33 composer.listPage.header=Composer Scripts
34
```

#### Localized Resource

Disabled Copy Save

```
1 composer.navigation.breadcrumb.scripts=Scripts
2 composer.navigation.breadcrumb.resources=Resources
3 composer.navigation.breadcrumb.script.editor=Editor
4 composer.navigation.breadcrumb.resource.editor=Editor
5 composer.navigation.link.home=Home
6 composer.navigation.link.resources=Resources
7 composer.navigation.link.scripts=Scripts Test
```

Default

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Scribe – The UI color scheme has been updated to reflect the Ellucian user experience standards currently in place. No functionality was changed.

The screenshot displays the 'Default Locale Scribe' application interface. At the top, there is a purple header bar with a menu icon on the left and help and share icons on the right. Below the header, the main content area is titled 'Search for a Block'. A purple bar labeled 'Open by Requirement ID' contains a dropdown menu set to 'RA', a text input field with '000000', and an 'Open' button. Below this is a section titled 'Block Selection Criteria' with two columns of filters. The 'Primary Tags' column includes 'Block Type and Value', 'Start Catalog Year', and 'Stop Catalog Year', each with a 'None' dropdown and an empty text input. The 'Secondary Tags' column includes 'Student ID', 'School', 'Degree', 'Major 1', and 'Major 2', each with a 'None' dropdown and an empty text input. At the bottom of the criteria section, there is a checkbox labeled 'Only Blocks With Errors'. A 'Clear' button and a 'Search for Blocks' button are located at the bottom left of the criteria section.

## Documentation

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The following documentation resources are provided in support of release 5.0.0, and are located in the Documentation Libraries on the Ellucian Support Center.

Please refer to the *Degree Works Changed Document List* delivered along with these files for a high-level description of information that was modified in the release 5.0.0 Degree Works documentation.

### Release Documentation

Ellucian Support Center – Title
Degree Works Release Guide 5.0.0
Degree Works Installation Guide 5.0.0
Degree Works RabbitMQ Installation Guide 5.0.0
Degree Works 3rd Party Software List 5.0.0
Degree Works Problem Resolutions 5.0.0
Degree Works Manifest 5.0.0
Degree Works Schema 5.0.0 ( <i>Text file</i> )

### Administration Documentation

Ellucian Support Center – Title
Degree Works Composer Administration Guide 5.0.0
Degree Works Scribe Administration Guide 5.0.0
Degree Works Student Educational Planner Administration Guide 5.0.0
Degree Works Transfer Equivalency Self-Service Administration Guide 5.0.0
Degree Works Transfer Finder Administration Guide 5.0.0

## Technical Documentation

Ellucian Support Center – Title
Degree Works Advanced Reporting Technical Guide 5.0.0
Degree Works Banner Considerations Technical Guide 5.0.0
Degree Works Banner Data Mapping for BIF Technical Guide 5.0.0
Degree Works Bridge Interface Format Technical Handbook 5.0.0
Degree Works Colleague Considerations Technical Guide 5.0.0
Degree Works Colleague Data Mapping for BIF Technical Guide 5.0.0
Degree Works Prerequisite Checking Technical Guide 5.0.0
Degree Works Server Sizing Technical Guide 5.0.0
Degree Works Shepherd Settings Technical Guide 5.0.0
Degree Works Surecode UCX Tables Technical Guide 5.0.0
Degree Works Technical Guide 5.0.0

## User Documentation

Ellucian Support Center - Title
Degree Works Scribe Language User Guide 5.0.0
Degree Works Shepentry User Guide 5.0.0
Degree Works Surecode User Guide 5.0.0
Degree Works Transfer Equivalency Admin User Guide 5.0.0
Degree Works Transit User Guide 5.0.0
Degree Works Web Interface User Guide 5.0.0

## API Documentation

A new “Composer API” has been added and is documented in the XE REGISTRY found at the Ellucian Support Center. This API supports customizing Shepherd Scripts and localizing or translating Language Properties by locale. The documentation for the “Authentication API” has also been updated to include creation and authentication of anonymous/social users.

Documentation for the Degree Works APIs is not delivered with the other documents in the Documentation Libraries, and is always found directly at the XE REGISTRY.

# Database Changes

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The Degree Works 5.0.0 release contains changes to the database. They are highlighted here to give an overview, but a review of the *Degree Works Schema* file can provide more detailed information.

## These tables are obsolete and have been removed:

DAP\_BATCH\_MST  
DAP\_MATCHED\_IDS\_DTL  
DAP\_REQ\_MST  
DAP\_REQ\_TEXT\_DTL  
DAP\_TRANSCRIPT\_MST  
RAD\_BIOG\_MST  
SHP\_FILTER\_DTL  
SHP\_NEXT\_CD\_DTL  
SHP\_NEXT\_ID\_DTL  
SHP\_PROXY\_DTL  
UCX\_SYS930  
UCX\_SYS941

## These tables have been added:

DAP\_REQ\_TREE  
SHP\_COMPOSER\_MST  
SHP\_RESOURCE\_MST  
UCX\_SHP080

## These records have been added:

UCX\_AUD012 ANON  
UCX\_AUD012 TREQ

## Changes to size of columns:

SHP\_USER\_ATTRIB.MODIFY\_WHO changed from 30 to 14 characters.  
SHP\_USER\_ATTRIB.CREATE\_WHO changed from 30 to 14 characters.  
SHP\_USER\_ATTRIB.MODIFY\_DATE changed from 14 to 7 characters.  
SHP\_USER\_ATTRIB.CREATE\_DATE changed from 14 to 7 characters.

## These database records are obsolete and are being removed:

UCX\_CFG020 PLANNERBLOCK  
UCX\_SYS935 D10ASDEG\*  
UCX\_SYS935 D10ASFIL\*  
UCX\_SYS935 D10ASPRM\*  
UCX\_SYS935 D10ASSTU\*  
UCX\_SYS935 D10COUNT\*  
UCX\_SYS935 D10FILES\*  
UCX\_SYS935 D10SRTAG\*  
SHP\_SERVICE\_MST SHP\_SERVICE=PSDGWSTD  
SHP\_SERVICE\_MST SHP\_SERVICE=SRNPCSCRIBE  
SHP\_SERVICE\_MST SHP\_SERVICE=SDTREQER

**These UCX settings are obsolete:**

UCX\_CFG020 DAP14 UseDapReqBlock  
UCX\_CFG020 WEBPARAMS Password Expire Increment  
UCX\_CFG020 WEBPARAMS Ignore Ipaddress  
UCX\_CFG020 WEBPARAMS Errors Script Prefix  
UCX\_CFG020 WEBPARAMS Wait stop seconds  
UCX\_CFG020 WEBPARAMS Web04 read timeout  
UCX\_CFG020 WEBPARAMS Enable ssb  
UCX\_CFG020 WEBPARAMS Enable external authentication  
UCX\_CFG020 WEBPARAMS Number of web04s  
UCX\_CFG020 WEBPARAMS Md5 timeout  
UCX\_CFG020 WEBPARAMS Md5 secret  
UCX\_CFG020 WEBPARAMS Allow logons

## Configuration Considerations

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The Degree Works 5.0.0 release requires customers to make manual modifications to several areas of the product. These areas are outlined in the *Degree Works Installation Guide*.