



# Ellucian Degree Works

Release Documentation, 5.1.2

February 21, 2024

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Ellucian  
2003 Edmund Halley Drive  
Reston, VA 20191  
United States of America

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# Degree Works Release Notes

Updated: September 29, 2023

Degree Works periodically releases new content and functionality. These release notes highlight key elements of the specified release.

# Release 5.1.2

Updated: September 29, 2023

Degree Works 5.1.2 includes new functionality, improves existing functionality, resolves change requests, and more.

For more detailed information about the release, see the [Degree Works 5.1.2](#) release record.

## General

Updated: September 29, 2023

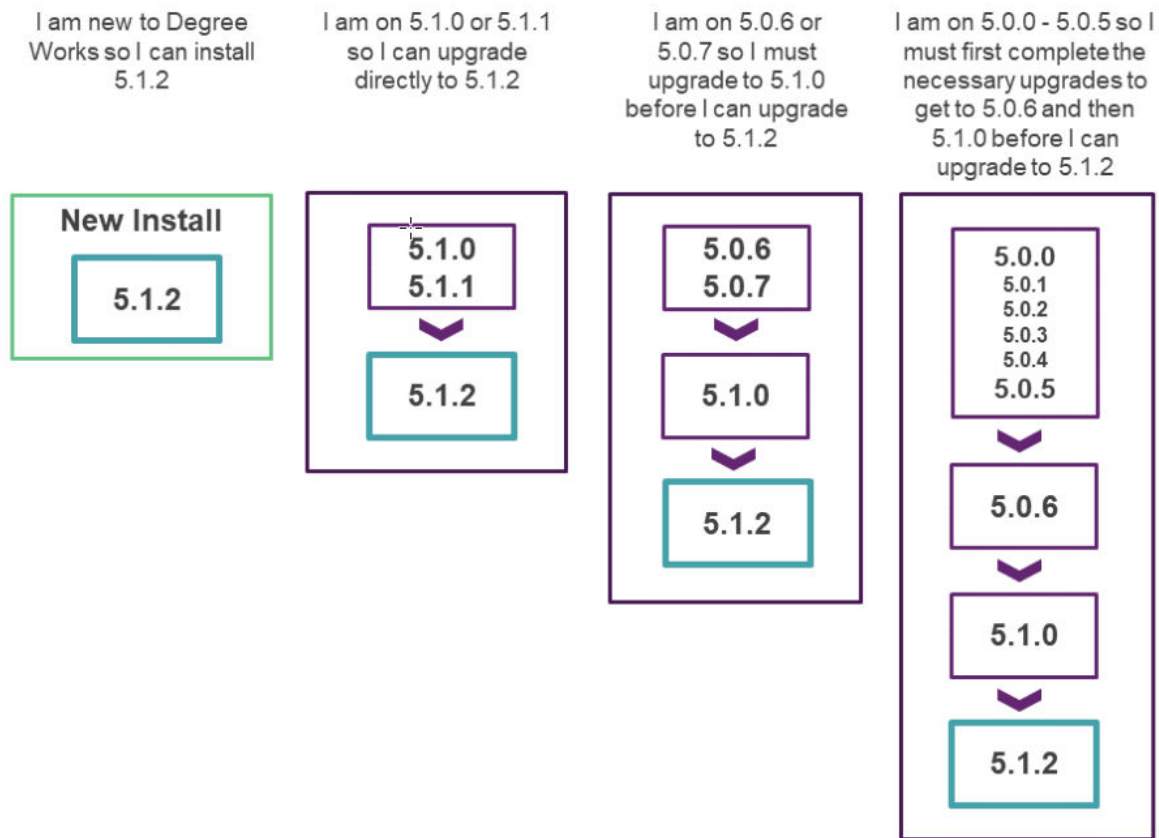
### Overview

The central themes of Release 5.1.2 include expanding the functionality offered in the Responsive Dashboard and Transit to meet the needs of the client base and enhancements to support Degree Works as a SaaS solution. Release 5.1.2 also meets customer satisfaction goals by delivering 7 improvements and 63 problem resolutions.

This release is a MINOR release so the version has been assigned as Release 5.1.2, and it will build on the baseline established by the previous MAJOR release, Release 5.1.0, and subsequent releases. This is still a significant release in terms of the product direction, and it continues to build on the infrastructure introduced for Cloud delivery.

### Upgrade path

The Degree Works Release 5.1.2 supports a new installation or a direct upgrade path for existing customers currently on Release 5.1.0 or Release 5.1.1.



With the release of Release 5.1.2, Release 5.1.0 and Release 5.1.1 are in Maintenance Support, while Releases 5.0.0 – 5.0.7 are in Sustaining Support. Details about Ellucian Support Assurance can be found in article number [000038478](#).

All Degree Works versions before 5.0.0 are in End of Support as of January 1, 2021. If you are on a 4.x version of Degree Works, you must upgrade to at least Release 5.1.0 to process Release 5.1.2.

We encourage customers to stay current with releases so multiple jumps are not required when processing a new release upgrade.

If you are on any service pack level, the upgrade path you should follow is from your base release as service packs are included in the next release. For example, if you are on 5.1.1.2, you would follow the path of upgrading from Release 5.1.1 to Release 5.1.2.

## Degree Works hardware and software requirements

Updated: September 29, 2023

### Supported hardware architectures and associated operating systems

For new client installations, only the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)

For upgrading clients only, the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)
- IBM running AIX 7.x (64-bit)
- Sun SPARC platform running Solaris 11 (64-bit)
- HP Integrity Platform (IA64) running HP-UX 11.x (64-bit)

Note: Ellucian's support of Linux 7 will end in June 2024. Starting with the 2024 Q3 release of Degree Works, Red Hat Linux 7 and Oracle Linux 7 will no longer be supported operating systems.

## Supported RDBMS

Degree Works Release 5.1.2 supports Oracle 19c.

Note: Ellucian's support of Oracle 12.2.0.1 ended March 31, 2022. This release of Degree Works may be incompatible with versions of Oracle earlier than 19c.

## Supported browsers

Ellucian makes every effort to test and support the current versions of the following browsers at the time of a release:

- Google Chrome
- Mozilla Firefox
- Apple Safari
- Microsoft Edge

For additional information, please review the [Ellucian Global Web Browser Support Policy and Matrix](#).

## RabbitMQ

Degree Works Release 5.1.2 supports the following versions:

- RabbitMQ server v3.12
- RabbitMQ client v0.13.0 or v0.11.0

Note: RabbitMQ ended General Support of server v3.8 on January 31, 2022 and server v3.9 on July 31, 2023. Release 5.1.2 may be compatible with these older RabbitMQ server versions, but it has only been tested with server v3.12 and any



Degree Works issues specific to older versions of RabbitMQ server may not be addressed by Ellucian.

## **Java**

Degree Works Release 5.1.2 requires Oracle Java Development Kit (JDK) or OpenJDK version 11 on both your classic and application servers.

## **GCC Compiler**

Degree Works Release 5.1.2 requires GCC version 8.x on Red Hat Enterprise Linux and Oracle Linux Server.

Note: This release of Degree Works is incompatible with GCC version 4.8.x, and the software will not compile with this GCC version.

## **Apache FOP**

Degree Works requires Apache FOP version 2.6 on the classic server.

## **OpenSSL**

Degree Works requires OpenSSL, including the openssl-devel package.

Note: Red Hat Enterprise Linux 8.x and Oracle Linux Server 8.x require version 1.1.1, while all other supported hardware architecture and operating system configurations require versions 1.0.1 or 1.0.2.

## **base64**

Degree Works requires the base64 program on the classic server. This is typically included in a standard Linux installation but may need to be installed separately on servers with other operating systems.

For more details on all hardware and software requirements, see [Degree Works Installation](#).

# **Enhancements**

## **API highlights**

Updated: September 29, 2023

### **Add health and monitoring endpoints to Degree Works applications**

Support for the Spring Boot Actuator module was added to all Degree Works applications to enable monitoring data through the /about, /health, /metrics, /prometheus, and /status endpoints in application APIs. By default these endpoints are not enabled, but setting the new

DW\_ENABLE\_MONITOR environment variable as true in the start script before deploying an application will enable this functionality.

For additional information about these endpoints, see Ellucian API Catalog > Degree Works API Catalog > [applicable module/topic] > Actuator section.

## Audit highlights

Updated: September 29, 2023

### **Elective Credits Allowed should obey UCX DAP14 "Fall-thru courses count in the overall GPA" flag**

When the CFG020 DAP14 **Fall-through courses count in the overall GPA** flag is set to No, all of the classes in Fall-through will now show as ECA-OVERFLOW because no fall-through classes count towards the overall credits. In addition, when this flag is No, you are no longer required to scribe a Credits qualifier (with or without Pseudo) in any block.

### **PDF from the Responsive Dashboard is missing the Freeze Information**

If an audit has been saved with a description and/or freeze type, this information will now display on the PDF generated in Responsive Dashboard.

### **ArticulateAndAudit API not working**

In Release 5.1.1, the ArticulateAndAudit API in API Services was obsoleted. It was rewritten as the Audit Requirements API and retrieves Degree Works requirements in the form of an empty XML audit for a given school, degree, major, and catalog year.

## Banner highlights

Updated: September 29, 2023

### **Active Term calculation following useAdmitTerm logic not taking into account all use cases**

When integration.banner.extract.student.useAdmitTerm is true, the extract now uses the SORLCUR\_TERM\_CODE if it is not a future term and it is greater than the SORLCUR\_TERM\_CODE\_ADMIT. Otherwise, the SORLCUR\_TERM\_CODE\_ADMIT is used as the active term bridged to Degree Works.

### **When attempting to get the next request, dap61 retries immediately if it fails, potentially generating excessive logging**

Logging in DAP61 and DAP62 has been improved to be less verbose, especially when an error is detected. An error will now be logged only one time for each process until and unless a successful database operation is performed. After 10 consecutive errors, the programs will exit, and a new process will start up. On startup, if a database error is encountered, it will keep trying periodically to connect, for up to an hour, logging the connection error only one time.

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### **Pre-Req checking integration with Banner not STP-enabled**

Before this release, the prerequisite checking integration between Banner and Degree Works did not work for MEP (STP) clients. While the Degree Works listeners could be spun up for each entity, Banner had only one Oracle Advanced Queue, which sat outside of the MEP (STP) umbrella. Now, the VPDI code is included in all Banner request messages and the Degree Works listeners filter messages for the appropriate entity based on this VPDI code.

This resolution requires Banner changes delivered with PE0001958 in Banner Student 8.27, delivered on 6/28/2023.

## **CourseLink highlights**

Updated: September 29, 2023

### **When CourseLink looks up a school for a mapping and doesn't find one a bad json data error is created**

The CourseLink functionality has been modified to display only the transfer mappings of schools for which a RAD\_ETS\_MST record exists. Transfer mappings for schools that do not have a record will not display, preventing a JSON error.

It is not typical to have mappings for schools that do not have a RAD\_ETS\_MST record. If this is occurring at your site, it should be investigated.

## **Responsive Dashboard highlights**

Updated: September 29, 2023

### **Priority Sorting for Goal/Degree Picklist**

For students with multiple degree codes in the SIS (dual degree students), Degree Works allows the user to toggle between the degrees through a drop-down list. On initial page load, the degree that is first in the list is displayed, but the sort order is not based on a priority number coming from the SIS. With this enhancement, the degree codes now load in Responsive Dashboard and Ellucian Experience based on the priority order coming from the SIS.

### **Plan title changes automatically when the Active flag is unchecked**

When a user opens an active plan and unchecks the Active flag, the title of the plan no longer changes to that of the most recently modified plan.

### **Planner still-needed is missing rules in if-statements if the first child rule is 100% complete**

There was an issue in the Plans Still Needed sidebar and drawer when the first child in an if-statement was 100% complete. The remaining child rules were skipped by the still-needed logic. Now the incomplete child rules within an if-statement will display even when the first child rule is 100% complete.

## Transit highlights

Updated: September 29, 2023

### Allow contents of user class drop-down to be controlled by a flag in UCX-AUD012

In Release 5.1.1, a user class drop-down was added to RAD33 in Transit so the user can select which non-student user class should be applied to the IDs being extracted from Banner. However, UCX-AUD012 contains user classes that aren't valid for RAD33, such as API, APP, and STU. A new **Show in RAD33** flag has been added to the AUD012 User Class Codes, allowing the user class drop-down in the Transit RAD33 job to be filtered.

### Schedule single jobs on a recurring basis in Transit

In Transit, in addition to scheduling a job to run at a future date and time, you can now schedule jobs to run on a recurring basis. Jobs can be scheduled to run on a daily, weekly, monthly, or yearly basis with either a specified end date or forever.

As part of this enhancement, access to schedule jobs now requires a Shepherd key. As part of the release configuration, this key must be explicitly assigned to users.

### Save job parameters for reuse in Transit

The selection criteria and responses to questions for frequently run jobs can now be saved for reuse by any user who has been given access to this feature.

## Updates

Updated: September 29, 2023

### Database changes

There are several Transit database changes in Release 5.1.2.

The SCHEDULE\_TIME field was removed from TRANSIT\_JOB\_INSTANCE.

The SAVED\_JOB\_ID field was added to TRANSIT\_INPUT.

The following tables were added:

- TRANSIT\_SAVED\_JOB
- TRANSIT\_SCHEDULED\_REQUEST

### Documentation

The documentation for this release is available on the Ellucian Documentation site. It can be viewed interactively and, if desired, can be exported in total or by topic. A logon for the Customer Center will be required to access the entire suite of documentation.

A small subset of user documentation can be found on the Ellucian Documentation site under the Use category. The Use category is available to all users, including those without a Customer Center login.

Transfer Equivalency Self-Service will continue to have online help built in because the target audience for this application is a prospective student.


You can find Degree Works product documentation in the Customer Center under Resources > Documentation > All Documentation > selecting Degree Works.

Degree Works API documentation is also available in the Customer Center under Resources > Documentation > All Documentation > API Catalog.

## Degree Works 5.1.2 Service Pack 1

Updated: November 15, 2023


This patch corrects defects reported with Degree Works Release 5.1.2.

Click Attachment  on this page to download the service pack general information and instructions.

## Degree Works 5.1.2 Service Pack 2

Updated: January 12, 2024

This patch corrects defects reported with Degree Works Release 5.1.2.

Click Attachment  on this page to download the service pack general information and instructions.

# Release 5.1.1

Updated: March 24, 2023

Degree Works 5.1.1 includes new functionality, improves existing functionality, resolves change requests, and more.

## General

Updated: March 24, 2023

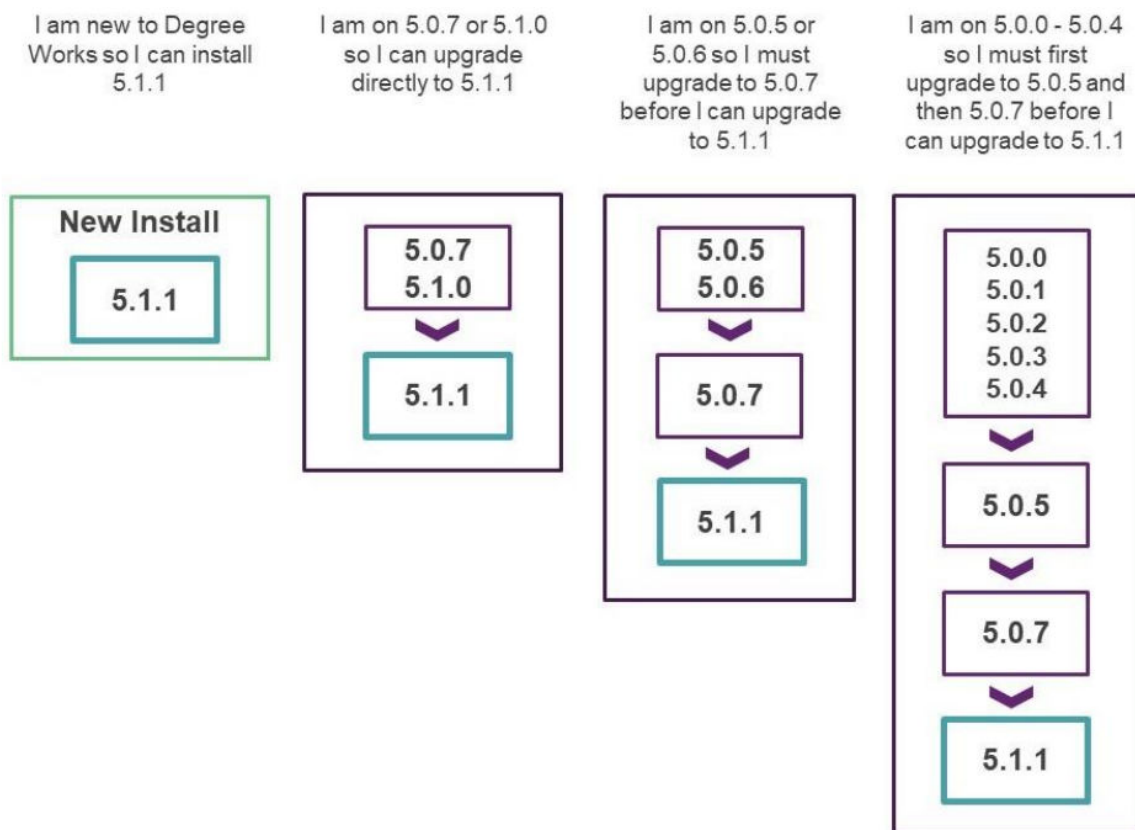
### Overview

The central themes of Release 5.1.1 include expanding the functionality offered in the Responsive Dashboard to meet the needs of the client base as they move to this and enhancements to support Degree Works as a SaaS solution. Release 5.1.1 also meets customer satisfaction goals by delivering 20 improvements and 76 problem resolutions.

This release is a MINOR release so the version has been assigned as Release 5.1.1 and it will build on the baseline established by the previous MAJOR release, Release 5.1.0, and subsequent releases. This is still a significant release in terms of the product direction, and it continues to build on the infrastructure introduced for Cloud delivery.

### Upgrade path

The Degree Works Release 5.1.1 supports a new installation or a direct upgrade path for existing customers currently on Release 5.0.7 or Release 5.1.0.



With the release of Release 5.1.1, Release 5.0.7 and Release 5.1.0 are in Maintenance Support, while Releases 5.0.0 – 5.0.6 are in Sustaining Support. Details about Ellucian Support Assurance can be found in article number [000038478](#).

All Degree Works versions before 5.0.0 are in End of Support as of January 1, 2021. If you are on a 4.x version of Degree Works, you must upgrade to at least Release 5.0.7 to process Release 5.1.1.

We encourage customers to stay current with releases so multiple jumps are not required when processing a new release upgrade.

If you are on any service pack level, the upgrade path you should follow is from your base release as service packs are included in the next release. For example, if you are on 5.1.0.2 you would follow the path of upgrading from Release 5.1.0 to Release 5.1.1.

## Hardware and software requirements

Updated: March 24, 2023

### Supported hardware architectures and associated operating systems

For new client installations, only the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)

For upgrading clients only, the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)
- IBM running AIX 7.x (64-bit)
- Sun SPARC platform running Solaris 11 (64-bit)
- HP Integrity Platform (IA64) running HP-UX 11.x (64-bit)

Note: Ellucian's support of Linux 7 will end in June 2024. Starting with the 2024Q3 release of Degree Works, Red Hat Linux 7 and Oracle Linux 7 will no longer be supported operating systems.

## Supported RDBMS

Degree Works Release 5.1.1 supports Oracle 19c.

Note: Ellucian's support of Oracle 12.2.0.1 ended March 31, 2022. This release of Degree Works may be incompatible with versions of Oracle earlier than 19c.

## Supported browsers

Ellucian makes every effort to test and support the current versions of the following browsers at the time of a release:

- Google Chrome
- Mozilla Firefox
- Apple Safari
- Microsoft Edge

For additional information, please review the [Ellucian Global Web Browser Support Policy and Matrix](#).

## RabbitMQ

Degree Works Release 5.1.1 supports the following versions:

- RabbitMQ server v3.9
- RabbitMQ client v0.10.0 or v0.11.0



Note: RabbitMQ General Support of server v3.8 ended January 31, 2022. Please review the prerequisites specific to your OS before upgrading the RabbitMQ server or client.

## Java

Degree Works Release 5.1.1 requires Oracle Java Development Kit (JDK) or OpenJDK version 11 on both your classic and application servers.

## GCC Compiler

Degree Works 5.1. supports GCC versions 4.8.x and 8.x. For upgrading clients GCC version 6.3.0 on AIX is also supported.

Note: Red Hat Enterprise Linux 8.x and Oracle Linux Server 8.x require GCC 8.x.

## Apache FOP

Degree Works requires Apache FOP version 2.6 on the classic server.

## OpenSSL

Degree Works requires OpenSSL, including the openssl-devel package.

Note: Red Hat Enterprise Linux 8.x and Oracle Linux Server 8.x require version 1.1.1, while all other supported hardware architecture and operating system configurations require versions 1.0.1 or 1.0.2.

## base64

Degree Works requires the base64 program on the classic server. This is typically included in a standard Linux installation but may need to be installed separately on servers with other operating systems.

For more details on all hardware and software requirements, see [Degree Works Installation](#).

# Enhancements

## Audit highlights

Updated: March 24, 2023

### Store audit results as a BLOB in the database for improved performance

A new database table, DAP\_AUDIT\_TREE, has been added that allows for the body of the audit to be stored in a single BLOB rather than in multiple DAP\_AUDTREE\_DTL records. This can reduce the amount of time it takes to read from the database when the audit is being viewed and to write to the database when new audits are generated.

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The DAP\_AUDIT\_DTL remains the parent table for the DAP\_AUDTREE\_DTL in addition to the DAP\_AUDIT\_TREE. The DW\_AUDIT\_BLOB environment variable controls to which child table the audit body is written. By default, the DAP\_AUDTREE\_DTL will be used; setting DW\_AUDIT\_BLOB to 1 in dwenv.config will enable the new DAP\_AUDIT\_TREE functionality.

### **False evaluation for IF Statements in Header when based on a class whose discipline is not used in block rules**

When using IF statements in the header based on a course (for example, If (ACCT 1100 is FOUND) Then), when there are no requirements in any rules in the block referencing courses of the same discipline, the IF statement will now resolve to true if the student has taken that course.

### **Max qualifiers may not be enforced when group rules are used and classes are reapplied from fall-through**

The MaxCredits, MaxClasses, and MaxPerDisc qualifiers on group rules are now being rechecked when classes are reapplied to groups after being initially placed in fall-through.

### **Limit audit JSON/XML output based on RPT036 flags to improve performance**

A new Shepherd setting, core.audit.view.reduceAuditTree.enabled, has been added to control the amount of JSON or XML output created when generating audits. When set to true, only the data that will be used in formatting the results as indicated by the UCX-RPT036 flags for that audit format will be output to the JSON or XML, limiting its size and the time spent in producing and transmitting audits. By default, core.audit.view.reduceAuditTree.enabled is delivered set to false.

## **Authentication highlights**

Updated: March 24, 2023

### **SSO login fails silently if shp\_access\_code is null**

Single sign-on to Degree Works applications will now be successful with a user having a NULL SHP\_ACCESS\_CODE value in the SHP\_USER\_MST table. Previously the single sign-on request would fail even though SSO does not authenticate against this password.

### **Degree Works needs to allow for more secure SAML signature hash algorithms like SHA-256**

Degree Works now supports SAML2 protocols like RSA-256 signature hashing. As part of this implementation, several new Shepherd settings have been added:

- core.security.saml.assertionConsumerUrl
- core.security.saml.entityId
- core.security.saml.metadata.identityProviderUrl

During the upgrade process, existing SAML configurations will be converted into these new settings and you should see no disruption to your authentication process if you use SAML. Note that there are several other changes in the SAML implementation. For more information, see the [SAML single sign-on and sign-off](#) topic.

## Add ability to send a SAML2 single logout (SLO) request

By default, when users log off, a DegreeWorks application, they are able to access that application and others again without re-authenticating, because Degree Works does not log them off of the central identity provider. Single sign-off from all applications when logging out of a Degree Works application can be enabled by changing the `core.security.singleSignoutEnabled` Shepherd setting to true. A logout request assertion will be sent to the identity provider to log out the user and they will then not be able to run a Degree Works application nor any other application authenticated by that provider on that browser session. For more information, see the [SAML single sign-on and sign-off](#) topic.

## Banner highlights

Updated: March 24, 2023

### Support additional user classes in a non-student extract from Banner

To allow institutions to manage access for a broad range of non-student users and reduce the amount of manual adjustments needed to select and bridge non-student data into Degree Works, the Banner extract has been enhanced to process these users by user class.

RAD33 in Transit should now be used to extract all non-student users (advisors, deans, registrar users, etc.) from Banner to Degree Works. The RAD31 advisor extract has been removed. The SQL to select the users for a particular user class is now defined in a Shepherd setting specific to that user class. That is, users in the ADV user class will be selected using `integration.banner.extract.adv.sql.daily` while users in the ADVX user class will be selected using `integration.banner.extract.advx.sql.daily`.

### Degree Works bannerextract staff missing default sql SHP setting

This defect is resolved by the above enhancement (Support additional user classes in a non-student extract from Banner.)

### CURRULE extract stops when encountering the first SORMCRL\_DAU\_IND = N and does not continue to see if the program has been reactivated.

### Curriculum Rules extract should be able to end the term range of a code without a SORCMJR/SORCMNR/SORCCON record with the DAU\_IND set to N.

To resolve these two defects, a new Shepherd setting- `integration.banner.extract.curriculumRules.multipleRanges.enabled`-was added. When true, the curriculum rules extract will be able to extract multiple ranges for curriculum rules that were disabled and enabled again in different catalog years in addition to the associated majors, minors, and concentrations. It will also allow these items to be automatically ended if a new year starts but the item is not included in the new year, even if `SORMCRL_DAU_IND` is not set to N.

---

## Increase the length of RAD\_ETS\_CODE from 10 bytes to 20 bytes

### Degree Works transfer school fields are not large enough to accommodate values from STVSBGI\_DESC (transfer school name)

To support Banner Student's increase of STVSBGI\_CODE from 6 characters to 20 characters and STVSBGI\_DESC from 30 characters to 100 characters, several database changes were made. These changes are backwards compatible with any Banner version. The following tables are impacted by these changes. See the Database Changes section of this document for the specific fields.

- DAP\_MAP\_COND\_DTL
- DAP\_MAPPING\_DTL
- DAP\_RESCLASS\_DTL
- DAP\_TRANSFER\_DTL
- RAD\_ETS\_MST
- RAD\_TRANSFER\_DTL
- TRF\_IMPORT\_SCHOOL
- TRF\_SELF\_REPORTED\_CLASS

For non-Banner sites, note that these changes also impact BIF record layouts. You need to review the layout changes in the documentation and modify your extract as needed.

### **bannerextract student error: "BuildGpaTerm: ERROR: No GPA record found in Banner for this configured GPA type: I; can't create the TERM record!"**

The Banner student extract will no longer show a "No GPA record found in Banner for this configured GPA type" error message in the log file if the students being extracted do not have any GPA records for the GPA type set in CFG020 BANNER.

## Controller highlights

Updated: March 24, 2023

### **Change the newdash Shepherd setting specification to dashboard**

The following obsolete Shepherd setting specifications have been removed from Controller - gateway, scribe, shell, and TransferFinder. Also, the specification for Responsive Dashboard application has been changed from newdash to dashboard. As part of the update, any existing Shepherd settings with a newdash specification will be changed to dashboard.

## RabbitMQ highlights

Updated: March 24, 2023

## Enable verification of peer certificates when using RabbitMQ SSL

You can now enable peer certificate verification with the RabbitMQ SSL implementation. Two new environment variables have been added for this - `AMQP_VALIDATE_PEER_CERTIFICATE` and `AMQP_SERVER_CA_CERTIFICATE_PATH`. To enable peer verification, the `AMQP_VALIDATE_PEER_CERTIFICATE` variable should be set to 1 and the `AMQP_SERVER_CA_CERTIFICATE_PATH` variable should be set to the path of the CA certificate in the classic server's `dwenv.config` file.

## Responsive Dashboard highlights

Updated: March 24, 2023

### Control Student Header Information by user class

The display of custom data in the student header can now be configured by user class so that advisors can view data that is not visible to the student. By creating additional Shepherd settings for `dash.studentHeader.custom.items/dash.worksheets.custom.items/core.audit.printView.studentHeader.custom.items` with a user class appended, these custom data items will be shown only to users with this user class, in addition to the links defined in the base `dash.studentHeader.custom.items/ dash.worksheets.custom.items/core.audit.printView.studentHeader.custom.items` settings. This functionality is available in the Responsive Dashboard in addition to PDF audits generated through the dashboard or in batch through Transit.

### Implement access by user class to Links

You can now create additional settings for `dash.navigation.links.items` with a user class suffix. Users in the user class will get these links in addition to those in the standard `dash.navigation.links.items` setting. This allows you to have different links for different user classes. Furthermore, you can add a student ID and degree parameter in the link URL property to pass the student's ID and degree to one of your APIs.

### SEP: Display plan total credit count

In the plan header, the total number of planned credits now displays. This is the sum of the term total credits (total class requirement credits plus minimum credits on choice requirements, if specified).

### SEP: Control if a user can modify the Active flag on a plan

User access to modify the Active flag on a plan can now be managed with the `SEPPACTV` Shepherd key. If users have this key, they will be able to change the Active flag on a plan. For users without this key, the Active flag will be display only.

### Show date modified hover display on Notes

Hovering over the **Created on** field of an audit, planner, or template note will now tell you either the time the note was created or the modification date and time and name of the modifier, if the note was modified.

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**SEP: Add pagination navigation arrows to Courses sidebar in Plans and Template Management and for wildcards and ranges in the Plans Still Needed sidebar**

For disciplines that have more than 10 courses in the Courses sidebar in Plans and Templates, and for wildcards and ranges with more than 10 courses in the Still Needed sidebar in Plans, forward and backward pagination arrows have been added to allow the user to more easily navigate the results pages.

**Localized property dash.home.context.levelFormat.none is not working**

When the student's classification is blank on the goal record, the dashboard will now honor the localized property dash.home.context.levelFormat.none so that you will see *Classification (none)* in the student header. This appears to have been fixed indirectly by changes made in the 5.1.0 release.

**Error trying to expand approved petition and load student's audit - "There was an error loading a worksheet. Cannot read properties of undefined (reading 'date')"**

The latest audit now properly displays when applying exceptions to an audit in Exception Management, even when accessed before retrieving any students.

**SEP: When adding a course that has rad\_credits with a decimal (such as 0.5), the credits after the decimal get dropped when added to the plan.**

When adding a course that has credits with a decimal (such as 0.5), credits are no longer dropped when adding Course Requirements through the sidebar.

## Scribe highlights

Updated: March 24, 2023

**Run a new audit when changes to the Scribe blocks are detected**

A new Shepherd setting, core.audit.process.runOnScribeChanges.enabled, has been added to allow new audits to be automatically generated when changes to Scribe blocks are detected. When this setting is true, a new audit will be generated if any of the audit's blocks have changed from when the audit was created when a user is viewing an audit. This also occurs when creating a PDF from the most recent audit or using DAP22 to create CPA data from the most recent audit.

**Scribe parse/save routine should catch invalid characters**

When parsing blocks using the parse, save, or save as actions in Scribe, the block text will first be checked for invalid characters typically caused by copying and pasting from Word, PDF, or other external documents. The user will need to first correct the invalid characters before being able to parse and save a block.

**Allow Scribe editor length to be responsive to the browser window**

The height of the Scribe editor is now responsive to the browser viewport height, allowing a maximum display of the block text.

## Transit highlights

Updated: March 24, 2023

### **DAP22/DAP27/DAP28 taking a long time to run large batches**

The performance issue with launching DAP22, DAP27, or DAP28 with more than 1,000 students has been fixed.

### **Create process to periodically clean up old jobs**

Transit now has a job cleanup scheduler to perform database cleanup. By default, this is scheduled to run twice a day and jobs older than 14 days will be deleted. You can alter the default scheduling using the environment variable `TRANSIT_CLEANUP_SCHEDULER` and alter the age of the jobs to be deleted in the Shepherd settings `transit.cleanup.completed.maxDays` (for `DONE`, `FAILED`, or `TERMINATED` jobs) and `transit.cleanup.incomplete.maxDays` (for `PENDING`, `RUNNING`, or `CLEANUP` jobs).

Additionally, you can also enable/disable the cleanup of unused input files. That is, entries in the `TRANSIT_INPUT` table that have a null `TRANSIT_JOB_ID` using the environment variable `TRANSIT_CLEANUP_INPUT_ENABLED`, which is enabled by default.

### **Show a FAILED job instance status in Transit when a job fails instead of DONE**

The job status showing in Transit is now always set based on the job's exit code. Previously, the status in the Manage Jobs tab would show as Done if a job successfully launched in Transit but ultimately was unsuccessful due to errors in the job itself. Now the Manage Jobs status will be Failed, letting the user know they should review the log files for additional information.

### **tbestop should ignore port when url is set**

The `tbestop` command has been changed to ignore the value of the `TRANSIT_EXECUTOR_PORT` environment variable when the `TRANSIT_EXECUTOR_URL` environment variable is set. Instead, the port should be included in the `TRANSIT_EXECUTOR_URL` environment value, if necessary.

## What-If highlights

Updated: March 24, 2023

### **After running CPOS or What-if API for a student, academic audit is run but only saved if the CPOS/What-if audit itself is saved**

When a What-If API request is made (for example, from CPOS), and the student's data is refreshed from Banner, the newly run academic audit is now properly saved to the database even if the What-If audit is not being saved.

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### Missing UCX entries causing What-If to endlessly spin - Uncaught (in promise) TypeError: Cannot read property 'minors' of undefined

When a drop-down for a goal item in What-If has no entries in its corresponding UCX table, this will no longer prevent the What-If from working.

### Add individual catalog year options for What-If choices

When the new Shepherd setting `core.whatIf.enableGoalCatalogYear` is true, a catalog year for each of the goal items in the What-if Areas of Study and the Additional Areas of Study in Responsive Dashboard can be selected, allowing for different curriculum for these items based on catalog year.

## Updates

Updated: March 24, 2023

### Database changes

There are several database changes in Release 5.1.1.

For non-Banner sites, several of these changes also impact BIF record layouts. You should now use R702ETSM instead of R701ETSM, R083TRAN instead of R082TRAN, R201TREQ instead of R200TREQ, R652MAPD instead of R651MAPD, and R658MAPC instead of R655MAPC. Please review the layout changes in the documentation and modify your extract as needed.

The DAP\_SCHOOL\_ID field was increased from 10 bytes to 20 bytes on the following tables:

- DAP\_MAP\_COND\_DTL
- DAP\_MAPPING\_DTL
- DAP\_TRANSFER\_DTL

The following fields on the RAD\_ETS\_MST were increased from 10 bytes to 20 bytes:

- RAD\_ETS\_CODE
- RAD\_ETS\_DOE
- RAD\_ETS\_FICE
- RAD\_ETS\_TAX\_ID
- RAD\_ETS\_USER

The RAD\_TR\_ETS field on the RAD\_TRANSFER\_DTL was increased from 10 bytes to 20 bytes.

The SCHOOL\_CODE field was increased from 16 bytes to 20 bytes on the following tables:

- TRF\_IMPORT\_SCHOOL



- TRF\_SELF\_REPORTED\_CLASS

The DAP\_TR\_SCHL\_NAME field was increased from 30 bytes to 100 bytes on the following tables:

- DAP\_RESCLASS\_DTL
- DAP\_MAPPING\_DTL

The RAD\_ETC\_SCHOOL field on the RAD\_ETC\_MST was increased from 30 bytes to 100 bytes.

The RAD\_TR\_NAME field on the RAD\_TRANSFER\_DTL was increased from 30 bytes to 100 bytes.

The SESSION\_ID field was added to the TOKEN\_REVOCATION\_MST.

The following tables were added:

- DAP\_AUDIT\_TREE
- SHP\_SESSION

The following tables were deleted:

- DAP\_COLLEGE\_DTL
- DAP\_TITLE\_DTL
- SHP\_SERVICE\_MST
- UCX\_STU351
- UCX\_STU362
- UCX\_STU379
- UCX\_STU380
- UCX\_STU382
- UCX\_SYS910
- UCX\_SYS942
- UCX\_SYS978
- UCX\_SYS987

## Documentation

As of Release 5.1.1, Degree Works documentation shifted publication from the Documentation Libraries to the Ellucian Documentation site. Instead of posting installation, release, administration, technical, and user guides as PDFs to the Customer Center, the content is now available through the Ellucian Documentation site where it can be viewed interactively and, if desired, can be

exported in total or by topic. A login for the Customer Center will be required to access the entire suite of documentation.

In addition, online help for all Degree Works applications except Transfer Equivalency Self-Service has moved to the Ellucian Documentation site under the Use category to ensure that it is always up-to-date and accessible. The Use category is available to all users, including those without a Customer Center login. Transfer Equivalency Self-Service will continue to have online help built in because the target audience for this application is a prospective student.


You are able to find Degree Works documentation in the Customer Center under Resources > Documentation > Degree Works.

Degree Works API documentation continues to be available in the Customer Center under Resources > Documentation > Find APIs.

## Degree Works 5.1.1 Service Pack 1

Updated: May 23, 2023


This patch corrects defects reported with Degree Works Release 5.1.1.

Click Attachments  on this page to download the service pack general information and instructions.

## Degree Works 5.1.1 Service Pack 2

Updated: July 28, 2023

This patch corrects defects reported with Degree Works Release 5.1.1.

Click Attachments  on this page to download the service pack general information and instructions.

# Release 5.1.0

Updated: September 30, 2022

Degree Works 5.1.0 includes new functionality, improves existing functionality, resolves change requests, and more.

## General

Updated: September 30, 2022

### Overview

The central themes of Release 5.1.0 include improving and standardizing the APIs for SEP4 (plans and templates), support for Western character sets, and enhancements to Transit to provide Degree Works as a SaaS solution. Release 5.1.0 also meets customer satisfaction goals by delivering 14 improvements and 101 problem resolutions.

This release is a MAJOR release so the version has been assigned as Release 5.1.0 and it will become the new baseline for Degree Works. This is a significant release in terms of the product direction, and it includes architectural changes in addition to functional enhancements. Most importantly, with Release 5.1.0, the Classic Dashboard is no longer a supported or delivered Degree Works feature.

### Upgrade path

The Degree Works Release 5.1.0 supports a new installation or a direct upgrade path for existing customers currently on Release 5.0.6 or Release 5.0.7.



With the release of Release 5.1.0, Release 5.0.6 and Release 5.0.7 are in Maintenance Support, while Releases 5.0.0 – 5.0.5 are in Sustaining Support.

All Degree Works versions before 5.0.0 are in End of Support as of January 1, 2021. If you are on a 4.x version of Degree Works, you must upgrade to at least Release 5.0.6 to process Release 5.1.0.

We encourage customers to stay current with releases so multiple jumps are not required when processing a new release upgrade.

If you are on any service pack level, the upgrade path you should follow is from your base release as service packs are included in the next release. For example, if you are on 5.0.7.2 you would follow the path of upgrading from Release 5.0.7 to Release 5.1.0.

For more details on the upgrade paths, see [Degree Works Installation](#).

## Hardware and software requirements

Updated: September 30, 2022

### Supported hardware architectures and associated operating systems

For new client installations, only the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)

For upgrading clients only, the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)
- IBM running AIX 7.x (64-bit)
- Sun SPARC platform running Solaris 11 (64-bit)
- HP Integrity Platform (IA64) running HP-UX 11.x (64-bit)

## **Supported RDBMS**

Degree Works Release 5.1.0 supports Oracle 19c.

Note: Ellucian's support of Oracle 12.2.0.1 ended March 31, 2022. This release of Degree Works may be incompatible with versions of Oracle earlier than 19c.

## **Supported browsers**

Ellucian makes every effort to test and support the current versions of the following browsers at the time of a release:

- Google Chrome
- Mozilla Firefox
- Apple Safari
- Microsoft Edge

For additional information, please review the [Ellucian Global Web Browser Support Policy and Matrix](#).

## **RabbitMQ**

Degree Works Release 5.1.0 supports the following versions:

- RabbitMQ server v3.9
- RabbitMQ client v0.10.0 or v0.11.0

Note: RabbitMQ General Support of server v3.8 ended January 31, 2022. Please review the prerequisites specific to your OS before upgrading the RabbitMQ server or client.

## **Java**

Degree Works Release 5.0.7 requires Oracle Java Development Kit (JDK) or OpenJDK version 11 on both your classic and application servers.

## **GCC Compiler**

Degree Works currently supports GCC versions 8.x.

Note: Ellucian's support of GCC version 4.8 ends September 30, 2022, and this and future releases of Degree Works may be incompatible with versions of GCC earlier than 8.x on Linux. While GCC 8.x is no longer a supported release series, it is a stable and more current version than GCC 4.x. Future Degree Works releases will support GCC 10.x or greater.

For upgrading clients only, GCC version 6.3.0 on AIX is also supported.

## **Apache FOP**

Degree Works requires Apache FOP version 2.6 on the classic server.

## **OpenSSL**

Degree Works requires OpenSSL, including the openssl-devel package.

Note: Red Hat Enterprise Linux 8.x and Oracle Linux Server 8.x require version 1.1.1, while all other supported hardware architecture and operating system configurations require versions 1.0.1 or 1.0.2.

## **base64**

Degree Works requires the base64 program on the classic server. This is typically included in a standard Linux installation but may need to be installed separately on servers with other operating systems.

For more details on all hardware and software requirements, see [Degree Works Installation](#).

# **Enhancements**

## **Audit highlights**

Updated: September 30, 2022

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**Fallthrough redemption issue - class reapplied then removed during redemption in favor of a class that is subsequently excluded by a Max qualifier**

**A class that could apply to an unsatisfied requirement sits in Fallthrough due to complications of fallthru redemption**

**Sometimes the auditor is not correctly applying classes to requirements when the class matches a header min qualifier or when ShareWith is involved**

Several improvements were made to the auditor engine to better handle certain Min/Max qualifiers, ShareWith, and redemption scenarios. The three defects listed above were resolved as a result.

**Exceptions on group rules and subsets display differently between the Dashboard Servlet and Responsive Dashboard.**

In Responsive Dashboard, only the sub rules which are fully or partially complete will show after a Force Complete exception is applied to a Subset - the incomplete sub rules are hidden. This is now similar to the behavior observed in Classic Dashboard.

## Banner highlights

Updated: September 30, 2022

**Sometimes duplicate rad\_primary\_mst records for the same rad\_id are getting created with a rad\_name = New**

Additional logic was put in place to prevent duplicate rad\_primary\_mst records from being inadvertently created when new students are bridged to Degree Works.

## CourseLink highlights

Updated: September 30, 2022

**Add Campus Code to Sections Table in CourseLink**

The new dash.courseLink.campus.enabled Shepherd setting controls whether the campus column should display in CourseLink. Additionally, the dash.courseLink.action.register.confirm.dialog.context and dash.courseLink.selected.course.value properties in DashboardMessages.properties can be localized to include campus.

## Ellucian Experience highlights

Updated: September 30, 2022

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## **Support the new Experience categories in the Degree Works Degree Progress and Academic Plans cards**

Support for the Card Placement Category functionality in Ellucian Experience configuration has been added for the Degree Progress and Academic Plans cards. This allows users to better organize their cards in Experience.

## **Support Experience authentication in the Degree Works Degree Progress and Academic Plans cards**

The Degree Progress and Academic Plans cards now support Ellucian Experience authentication protocols. It is no longer necessary to have a Degree Works user configured to access the APIs from Experience. Instead, a shared secret and token can be used in the configuration of these cards.

## **Responsive Dashboard highlights**

Updated: September 30, 2022

### **Expand advisee filtering to include options for school/level and college as well as department head**

Advisee filtering has been enhanced to optionally limit access to students in the Responsive Dashboard based on school/level and college, in addition to the existing department filters already available. Non-student users such as advisors, department heads, and deans can be configured to have access only to their advisees or students in their department, school/level, or college.

Changes include modification to the filter dialog in Controller Authorization/Users, three new `core.authorization.adviseeFiltering.*.enabled` Shepherd settings, a new `ADFILTER` Shepherd key and deprecation of the `ADVISIDS` and `ANYSTUID` Shepherd keys. See the [Advisee filtering](#) topic in the Degree Works online documentation for additional information.

### **The Graduation Calculator does not take into consideration that some students may have transfer credits or pass/fail courses that do not count in GPA credits**

In Responsive Dashboard, all three GPA calculators (Graduation, Term, and Advice) have been updated to take into account non-GPA credit classes such as pass/fail and transfer coursework. Additionally, the calculators now use the student's current GPA credits and GPA points from their most recent audit.

### **Improve and stabilize APIs for SEP4 (plans and templates)**

The backend Student Educational Planner APIs were rewritten, and significant changes were made to improve plan and template functionality. The goals for this project included making the APIs more granular so that specific portions of a plan (such as add a term, delete a requirement, add a note, and so on) could be modified, ensuring APIs follow current standards (for example, HATEOAS), and addressing nearly 40 outstanding defects.

As a result of this work, you can expect to see major changes to SEP4, especially in user authorization and configuration. The Shepherd keys that grant access to functionality were simplified. Many keys have been obsoleted and a few new ones have been introduced. As part of



the update process, you will be able to update your baseline SEP Shepherd groups. Doing so will simplify user configuration and testing. Several Shepherd settings were removed or consolidated, allowing for more consistent and reliable configuration of functionality.

Ellucian strongly recommends that you develop a comprehensive test plan for the plan and template functionality you use before updating to Release 5.1.0, and schedule enough time for your users to test and validate the Student Educational Planner in your test environment before updating your production environment. The online documentation for plans and templates has also been completely revised and should be referenced by all users as they test the new functionality.

## Security highlights

Updated: September 30, 2022

### **Establish a Content Security Policy (CSP) for Degree Works applications**

To support the display of Degree Works in iFrames for Ellucian Experience, while limiting other types of content sources, a Content Security Policy (CSP) was developed. The default policy generally requires no client configuration and allows Degree Works applications to operate in their normal standalone mode of operation. This can be altered with the `core.security.contentSecurityPolicy.*` Shepherd settings.

Note: You will need to configure the `core.security.contentSecurityPolicy.imgSrc` Shepherd setting so your school logo will display in Responsive Dashboard. If you do not configure this setting, your dashboard logo will show as a broken image. If you use SAML for authentication, you may also need to add your SSO service provider host value in `core.security.contentSecurityPolicy.formAction`. There may also be other rare instances where you are using Degree Works in a special manner that requires additional configuration of the `core.security.contentSecurityPolicy.*` settings.

## System highlights

Updated: September 30, 2022

### **The profile drop-down in Responsive Dashboard sometimes disappears prematurely**

The persona menus (Profile drop-down), on the right side of the header bar in applications, no longer disappear prematurely when the user tries to select or open the menu item (About, Help, Sign Out, and so on). Additionally, the Profile header label has now been removed. This applies to the Controller, Responsive Dashboard, Transit, and Transfer Equivalency Admin applications.

### **Degree Works applications should recover and reconnect when the connection to the Degree Works or Banner database is lost**

Degree Works Java applications and daemons now ping the Degree Works and Banner databases. If the connection has been lost, they will attempt to reconnect. Additionally, the user will have better messaging in Responsive Dashboard, and better messages will appear in the logs when the database could not be reached.

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## Support 8-bit Western character sets in Degree Works applications

Support for 8-bit Western character sets in student and advisor names, in addition to other data displayed in Degree Works applications, has been added. When configured, data with characters such as tildes and umlauts will display correctly. See the [Western character support](#) topic in the Degree Works documentation for additional information.

Non-Western character sets (that is, Chinese, Korean, Arabic, and so on) are still not supported at this time.

## Store the version of Degree Works in a database table

A new DEGREEWORKS table has been added to the database to record the release version for that environment. This will primarily be used for reporting with Insights and other Experience integrations.

## Transfer Equivalency highlights

Updated: September 30, 2022

### Integrate the API Services endpoints into the Transfer Equivalency Self-Service and the Transfer Equivalency Admin jars

The API Services endpoints that were being used in the Transfer Equivalency Self-Service and Transfer Equivalency Admin applications to generate transfer audits and perform validations, have been moved to their respective jars. API Services is no longer required to be deployed as a standalone app for licensed Transfer Equivalency clients.

## Transit highlights

Updated: September 30, 2022

### When DAP54 and DAP58 jobs are run successfully, the create who/date/what and modify who/date/what fields on the SEP\_PLAN\* tables may not get updated

When the DAP54 and DAP58 jobs run in Transit, the CREATE\_WHO, CREATE\_WHAT, CREATE\_DATE, MODIFY\_WHO, MODIFY\_WHAT, and MODIFY\_DATE fields on the SEP\_PLAN\* tables are now updated correctly.

### Log files for SEP java batch processes (e.g. DAP58) are missing the job summary information that was available in 4.1.6

When DAP54, DAP58, and DAP59 are run in Transit, the log files now show the students that were processed in addition to summary information.

### Run dapmapunload/load as a batch process

Two new jobs, DAP42 and DAP43, were created to unload and load mappings data through Transit.

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DAP42 will unload mappings to a .zip file that can be saved to the user's local PC. DAP43 will load the .zip file from the user's local PC into the Degree Works database. Access to the command line is no longer required to maintain mappings data across Degree Works environments.

### Run dapucxunload/load as a batch process

Two new jobs, DAP44 and DAP45, were created to unload and load UCX tables in bulk through Transit.

DAP44 will unload UCX tables to a .zip file that can be saved to the user's local PC. DAP45 will load the .zip file from the user's local PC into the Degree Works database. Access to the command line is no longer required to maintain UCX tables in bulk across Degree Works environments.

## Updates

Updated: September 30, 2022

### Database changes

There are several database changes in Release 5.1.0.

The SEQUENCE field was removed from the following tables:

- SEP\_PLAN\_NOTE
- SEP\_PLAN\_TERM\_NOTE
- SEP\_PLAN\_GROUP\_NOTE
- SEP\_PLAN\_GPA\_NOTE
- SEP\_PLAN\_CLASS\_NOTE
- SEP\_PLAN\_TEST\_NOTE
- SEP\_PLAN\_NONCOURSE\_NOTE
- SEP\_PLAN\_PLACEHOLDER\_NOTE
- SEP\_TMPL\_NOTE
- SEP\_TMPL\_TERM\_NOTE
- SEP\_TMPL\_GROUP\_NOTE
- SEP\_TMPL\_GPA\_NOTE
- SEP\_TMPL\_CLASS\_NOTE
- SEP\_TMPL\_PLACEHOLDER\_NOTE
- SEP\_TMPL\_TEST\_NOTE

- SEP\_TMPL\_NONCOURSE\_NOTE

The TMPL\_MST\_ID field was added to the following fields:

- SEP\_TMPL\_TERM\_NOTE
- SEP\_TMPL\_GROUP
- SEP\_TMPL\_GROUP\_NOTE
- SEP\_TMPL\_GPA
- SEP\_TMPL\_GPA\_NOTE
- SEP\_TMPL\_CLASS
- SEP\_TMPL\_CLASS\_NOTE
- SEP\_TMPL\_PLACEHOLDER
- SEP\_TMPL\_PLACEHOLDER\_NOTE
- SEP\_TMPL\_TEST
- SEP\_TMPL\_TEST\_NOTE
- SEP\_TMPL\_NONCOURSE
- SEP\_TMPL\_NONCOURSE\_NOTE

The CAMPUS field was increased from 2 bytes to 12 bytes on the following tables:

- SEP\_PLAN\_GROUP
- SEP\_PLAN\_CLASS
- SEP\_TMPL\_GROUP
- SEP\_TMPL\_CLASS

The LOCK\_VERSION field was added to SEP\_TMPL\_MST.

The SHP\_FILTER\_TYPE field was added to SHP\_USER\_MST.

The DEGREEWORKS table was added.

## Subtractions

In November 2021, it was announced that the Classic Dashboard interface (DashboardServlet, StudentPlanner (SEP3), TransferFinder (TRF1) and Gateway) will be deprecated effective with the PINKY release in September 2022. The complete deprecation announcement in Community can be found [here](#).

With Release 5.1.0, the Classic Dashboard components will not be delivered as part of the update files. There are several breaking changes in Release 5.1.0 that will cause Classic Dashboard to

fail to deploy or function. Using Classic Dashboard in a Release 5.1.0 environment is not a supported configuration.

## Documentation

As of Release 5.0.7, Degree Works documentation shifted publication from the Documentation Libraries to the Ellucian Documentation site. Instead of posting installation, release, administration, technical, and user guides as PDFs to the Customer Center, the content is now available through the Ellucian Documentation site where it can be viewed interactively and, if desired, can be exported in total or by topic. A logon for the Customer Center will be required to access the entire suite of documentation.

In addition, online help for all Degree Works applications except Transfer Equivalency Self-Service has moved to the Ellucian Documentation site under the Use category to ensure that it is always up-to-date and accessible. The Use category is available to all users, including those without a Customer Center login. Transfer Equivalency Self-Service will continue to have online help built in because the target audience for this application is a prospective student.


You are able to find Degree Works documentation in the Customer Center under Resources > Documentation > Degree Works.

Degree Works API documentation continues to be available in the Customer Center under Resources > Documentation > Find APIs.

## Degree Works 5.1.0 Service Pack 1


Updated: November 18, 2022

This patch corrects defects reported with Degree Works Release 5.1.0.

Click Attachments  on this page to download the service pack general information and instructions.

## Degree Works 5.1.0 Service Pack 2

This patch corrects defects reported with Degree Works Release 5.1.0.

Click Attachments  on this page to download the service pack general information and instructions.

# Release 5.0.7

Updated: March 25, 2022

Degree Works 5.0.7 includes new functionality, improves existing functionality, resolves change requests, and more.

## General

Updated: March 25, 2022

### Overview

The central themes of Release 5.0.7 include expanding the functionality offered in the Responsive Dashboard to meet the needs of the client base as they move to this interface, support for Banner course registration from Course Link, and enhancements to Transit to provide Degree Works as a SaaS solution. Release 5.0.7 also meets customer satisfaction goals by delivering 16 improvements and 105 problem resolutions.

This release is a MINOR release so the version has been assigned as Release 5.0.7, and it will build on the baseline established by the previous MAJOR release – Release 5.0.0 – and subsequent releases. This is still a significant release in terms of the product direction, and it continues to build on the infrastructure introduced for Cloud delivery.

### Upgrade path

The Degree Works Release 5.0.7 supports a new installation or a direct upgrade path for existing customers currently on Release 5.0.5 or Release 5.0.6.



All Degree Works versions before 5.0.0 are in End of Support as of January 1, 2021. If you are on a 4.x version of Degree Works, you must upgrade to at least Release 5.0.5 to process Release 5.0.7.

We encourage customers to stay current with releases so multiple jumps are not required when processing a new release upgrade.

If you are on any service pack level, the upgrade path you should follow is from your base release as service packs are included in the next release. For example, if you are on 5.0.6.2, you would follow the path of upgrading from Release 5.0.6 to Release 5.0.7.

For more details on the upgrade paths, see [Degree Works Installation](#).

## Hardware and software requirements

Updated: March 25, 2022

Before beginning a new installation or upgrade, be sure to verify that your Degree Works environments meet the hardware and software requirements.

### Supported hardware architectures and associated operating systems

For new client installations, only the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)

For upgrading clients, the following hardware architecture and operating system configurations are supported for Degree Works servers:

- Intel-based x86 running Red Hat Enterprise Linux 7.x or 8.x (64-bit)
- Intel-based x86 running Oracle Linux Server 7.x or 8.x (64-bit)
- IBM running AIX 7.x (64-bit)
- Sun SPARC platform running Solaris 11 (64-bit)
- HP Integrity Platform (IA64) running HP-UX 11.x (64-bit)

### **Supported RDBMS**

Degree Works Release 5.0.7 supports Oracle 19c.

Note: Ellucian's support of Oracle 12.2.0.1 ends March 31, 2022. This and future releases of Degree Works may be incompatible with versions of Oracle earlier than 19c.

### **Supported browsers**

Ellucian makes every effort to test and support the current versions of the following browsers at the time of a release:

- Google Chrome
- Mozilla Firefox
- Apple Safari
- Microsoft Edge

For additional information, please review the [Ellucian Global Web Browser Support Policy and Matrix](#).

### **RabbitMQ**

Degree Works Release 5.0.7 supports RabbitMQ server v3.9, Erlang 24 and RabbitMQ client v0.11.0.

### **Java**

Degree Works Release 5.0.7 requires Oracle Java Development Kit (JDK) or OpenJDK version 11 on both your classic and application servers.

### **GCC Compiler**

Degree Works currently supports GCC versions 4.8.x and 8.x. For upgrading clients, GCC version 6.3.0 on AIX is also supported.



## Apache FOP

Degree Works requires Apache FOP on the classic server and currently supports versions 1.1 and 2.6.

The Responsive Dashboard PDF audit from both the UI and Transit requires version 2.6, while the classic Dashboard PDF audit from both the UI and Transit still use version 1.1.

## OpenSSL

Degree Works requires OpenSSL, including the openssl-devel package.

Note: Red Hat Enterprise Linux 8.x and Oracle Linux Server 8.x require version 1.1.1, while all other supported hardware architecture and operating system configurations require versions 1.0.1 or 1.0.2.

## base64

Degree Works requires the base64 program on the classic server. This is typically included in a standard Linux installation but may need to be installed separately on servers with other operating systems.

For more details on all hardware and software requirements, see [Degree Works Installation](#).

# Enhancements

## API highlights

Updated: March 25, 2022

### **To retrieve a plan from the Responsive Dashboard using an API call, the user must have the SDWORKS key**

The SDWORKS Shepherd key is no longer required for a user to be able to call the Responsive Dashboard plans API. You may remove this key from users configured to make external API calls to retrieve plan data.

## Banner highlights

Updated: March 25, 2022

### **GPA Report items (GPATR, GPAOV, GPAIN) don't follow DAP14 rounding/length flags**

The Banner extract now follows the CFG020 DAP14 Round the GPA and Display GPA number of decimal places flags when extracting GPA Report items (GPATR, GPAOV, GPAIN).

**Historic repeats are not "revived" when current class does not have a class status of CH X**

When running audits, the system now applies transfer repeat classes, even if you have the CFG020 Banner Apply Historic Repeats configuration set to No, when the audit is run with the in-progress classes flag unchecked.

## Bridge highlights

Updated: March 25, 2022

**Responsive Dashboard: Provide Refresh Capability for RAD Clients**

Non-Banner schools can now implement the on-demand refresh button in the Responsive Dashboard. New settings tell the Responsive Dashboard to contact an API that you provide that will pass student data to the RAD08 daemon on the classic server.

Review the [Degree Works dynamic refresh](#) and [Student data refresh](#) documentation topics for additional information.

## Controller highlights

Updated: March 25, 2022

**Controller does not validate `core.security.rules.shpcfg` syntax**

Syntax validation has been added to the `core.security.rules.shpcfg` Shepherd setting in Controller Configuration. If there is syntax that is not valid in this setting, the user will not be able to save the value successfully until it's corrected.

## Ellucian Experience highlights

Updated: March 25, 2022

**Cannot choose whether to display SIS or DW GPA on Degree Progress card**

The Ellucian Experience Degree Progress card has been enhanced to follow the RPT036 settings related to the display of the credits, requirements, and GPA: Show SS GPA in Header, Show Progress Bar Requirements, Show Progress Bar Credits, and Show Overall GPA. The RPT036 report format that should be used is configured in the card management area of Ellucian Experience.

Additionally, the configuration of the Degree Progress and Academic Plans cards has been modified to only support connection to the Responsive Dashboard APIs. Connection to Classic Dashboard is no longer supported by the Ellucian Experience Degree Progress and Academic Plans cards.

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**Allow user to link to selected degree audit from Degree Progress card**

The Degree Progress card in Ellucian Experience now has a link allowing users to open a read-only view of the academic audit for the selected degree.

**Display only active plan(s) info in Academic Plans card and allow user to link to selected plan**

The Academic Plans card in Ellucian Experience has been enhanced to show only active plans. Each active plan has a link to open a read-only view of the selected plan.

## Responsive Dashboard highlights

Updated: March 25, 2022

**For variable credit courses, the credits shown in course link do not match with the credits shown when hovering over the course**

In Responsive Dashboard, the credits shown in the hover text on courses in rule advice and the credits shown at the top of the Course Link window now both show the low and high credits (for example, 3 to 5 Credits and 4 or 5 Credits) if the course has both credit values defined.

**No way to filter BAN080 custom data by school, degree, or program**

BAN080 has been enhanced to allow both school and degree to be included when extracting custom data to the rad\_report\_dtl or rad\_custom\_dtl tables. Both the Responsive Dashboard and PDF student headers filter this data based on the selected degree. Additionally, the rad\_custom\_dtl data pulled in through SCR002 is also filtered so the appropriate data is passed to the auditor for use with scribed if-statements.

**Allow config for hiding noncourses in fall-through**

A new Show Noncourses in Fall-through flag has been added to RPT036 to control the display of noncourses in the fall-through section of Responsive Dashboard and PDF audits.

**Cannot remove Email function**

The display of the Contact card in Responsive Dashboard can now be configured by user. If the user has the new CONTACT Shepherd key, the Contact card will display.

Warning! This is a breaking change for all users. You must explicitly assign the CONTACT key to users for them to have access to the Contact card. By default, the Contact card does not display.

**Show all advisors in contact when logged in as ADV or REG user**

A configuration has been added to allow advisors to see a student's advisor information and not just the student in the Contact card. When a non-student user has the CONTADVR Shepherd key, they will be able to view the student's advisor(s). Additional configuration in DashboardMessages.properties can control if an advisor type code or literal displays as well.

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## Option to display Class Summary in Responsive Dashboard

Classic Dashboard featured a Class Summary report that summarized term and cumulative credit and GPA data after each term of class data in addition to the audit section elective in which credits appeared. You can now configure the Class History in Responsive Dashboard to show the credit/GPA summaries and the elective credit sections.

Review the [dash.classHistory.auditSection.enabled](#) and [dash.classHistory.termSummary.enabled](#) Shepherd settings for additional configuration details.

## Invoke Class Registration from Course Link (Planner or Audit)

Support for calling the Banner Registration API to register a student for a course from Degree Works has been added to Responsive Dashboard.

When configured, an advisor can register a student for a single course through the sections area in Course Link on either the audit or in Plans, and if a course requires an authorization code for registration, the user will be prompted to provide one. The user will get a confirmation message in the Responsive Dashboard user interface if the request was successful. Degree Works only supports simple registration functionality and any registration issues will need to be addressed in Banner.

## Scribe highlights

Updated: March 25, 2022

### Integrate Scribe into the Controller user interface

Scribe has been moved from a stand-alone application to a function in Controller.

As part of the integration into Controller, several improvements to the user experience have been made to Scribe, most notably in the block editor. The Shepherd settings and keys used by Scribe have not changed so no additional configuration is required. This reduces the number of individual applications that need to be configured and deployed for Degree Works.

## Transfer Equivalency Self-Service highlights

Updated: March 25, 2022

### Integrate Applicant API into Transfer Equivalency Self-Service

The Applicant API functionality has been incorporated into the Transfer Equivalency Self-Service UI application and no longer needs to be deployed as a separate application.

## Transit highlights

Updated: March 25, 2022

### **Run dapblockunload/load as a batch process**

Two new jobs, DAP40 and DAP41, were created to unload and load Scribe block data through Transit.

DAP40 unloads blocks to a .zip file that can be saved to the user's local PC, and DAP41 loads the .zip file from the user's local PC into the Degree Works database. Access to the command line is no longer required to maintain Scribe data across Degree Works environments.

### **Add a new job that will delete student data**

The RAD40 Student Data Delete Processor allows an authorized user to select a student or group of students in Transit and delete their bridged data, audits, exceptions, plans, and so on from Degree Works. Access to the command line is no longer required to perform this data maintenance.

### **Schedule jobs in Transit to allow for off-hours execution**

The option to schedule a job to be launched at a future date and time has been added to Transit. Scheduled jobs display with a SCHEDULED status in the Manage Jobs tab until they are launched at the scheduled date and time.

### **'launchjob' does not acknowledge the RAD11FORCE parameter like 'bannerextract' does**

The RAD30 job in Transit has been enhanced to give the user the option to force new audits for students even when there are no data changes.

You can also force audits using launchjob by supplying the forceNewAudits question with a "true" answer in your rad30 JSON file. See the two rad30 sample JSON files in \$DGWHOME/samples.

## **General system highlights**

Updated: March 25, 2022

### **Improve authentication logging in Degree Works applications**

To facilitate improved usage tracking, logging of initial authentication events in all Degree Works applications has been enhanced. The following information will now be recorded in application logs:

- User Access ID (if available)
- Originating IP
- Message ID (key to locale-based message file)
- Message
- Severity - Severe, Warning, Informational
- Type - for example, Authentication, Authorization

- Action - for example, Log-in, Log-out
- Endpoint URL
- JWT Expiration (for successful logins)

## Updates

Updated: March 25, 2022

### Database Changes

There are several database changes in Release 5.0.7.

The DAP\_SET\_TYPE field was removed from DAP\_UNDECIDE\_DTL:

The following fields were removed from RAD\_PRIMARY\_MST:

- RAD\_COUNTRY
- RAD\_STATE

The RAD\_ETS\_COUNTRY field was removed from RAD\_ETS\_MST:

The SHP\_SETTINGS\_DESC field was removed from SHP\_SETTINGS\_MST:

The REQUIRED\_TERM field was removed from the following tables:

- SEP\_PLAN\_GROUP
- SEP\_PLAN\_CLASS
- SEP\_TMPL\_GROUP
- SEP\_TMPL\_CLASS

The SCHEDULE\_TIME field was added to TRANSIT\_JOB\_INSTANCE:

The TRANSIT\_INPUT table was added:

### Subtractions

In November 2021, it was announced that the Classic Dashboard interface (DashboardServlet, StudentPlanner (SEP3), TransferFinder (TRF1), and Gateway) will be deprecated effective with the PINKY release in September 2022. This means that as of the 2022 Q3 release (PINKY), Degree Works will no longer include these Classic Dashboard components.

Ellucian strongly recommends that you begin your adoption of Responsive Dashboard with Release 5.0.7, if you have not already done so.

## Documentation

As of Release 5.0.7, Degree Works documentation has shifted publication from the Documentation Libraries to the Ellucian Documentation site. Instead of posting installation, release, administration, technical, and user guides as PDFs to the Customer Center, the content is available through the Ellucian Documentation site, where it can be viewed interactively and, if desired, can be exported to PDF in total or by topic. As new and updated documentation is released, it will be released only to the Documentation site. A login for the Customer Center is required to access the entire suite of documentation.

In addition, online help for all Degree Works applications except Transfer Equivalency Self-Service has moved to the Ellucian Documentation site under the Use category to ensure that it is always up-to-date and accessible. The Use category is available to all users, including those without a Customer Center login. Transfer Equivalency Self-Service continues to have online help built in because the target audience for this application is a prospective student.

You are able to find Degree Works documentation in the Customer Center under Resources > Documentation > Degree Works.


Degree Works API documentation continues to be available in the Customer Center under Resources > Documentation > Find APIs.

Note: Classic Dashboard content was not migrated to the Ellucian Documentation site, but the PDFs for prior releases will still be available for download from the Customer Center. From the introduction of Responsive Dashboard with Release 5.0.2, there have been no improvements made to the Classic Dashboard, and the documentation for older releases is applicable to the 5.0.7 version of Classic Dashboard.

## Degree Works 5.0.7 Service Pack 1


Updated: May 20, 2022

This patch corrects defects reported with Degree Works Release 5.0.7.

Click Attachments  on this page to download the service pack general information and instructions.

## Degree Works 5.0.7 Service Pack 2

This patch corrects defects reported with Degree Works Release 5.0.7.

Click Attachments  on this page to download the service pack general information and instructions.