



Architectural Change to Extended Properties in Anthology Student 25.3

Upcoming Architectural Change: Refactoring of Extended Property Value Storage in Release 25.3.0

We're excited to share a significant improvement coming in Anthology Student release **25.3.0**, that enhances the performance and scalability of how extended property values are stored in the platform. This change is part of our ongoing commitment to improving system efficiency and maintainability. It emerged because so many of you, our clients, are using extended properties intensively across the system for various purposes.

As many of you have utilized extended properties extensively throughout the system, it may take us a bit longer to complete this compared to others. We appreciate your patience and understanding. To help address these concerns, a temporary change has been made within the product and a delay in the enforcement of the change will occur to allow time for adoption of the new tables into custom reports and integrations. As previously communicated, the product is transitioning from a single table, **SyExtendedPropertyValues**, to separate tables organized by entity type.

With this change in 25.3.0 Release, the existing **SyExtendedPropertyValues** table will be renamed to **SyExtendedPropertyvalue_2440323_backup**. Again, we recognize that updating custom reports, integrations and workflows will require manual effort, and we are committed to minimizing disruption during this transition.

As part of the 25.3.0 Release, to support you through this transition and to ensure that no existing reports or integrations are disrupted; we are providing a **compatibility view** that mirrors the old table structure. This view will concatenate data from the new extended properties tables into the format of the old table. This will allow users time to update their reports and integrations to the new tables without interruptions in service. Please note that this is a temporary solution. The compatibility view is scheduled for deprecation, with full removal planned in the **27.0.0 Release in the December 2026/~~January 2027~~ timeframe**, allowing everyone sufficient time to transition to the new tables.

If you are leveraging SQL server replication or an availability group for

SyExtendedPropertyValues table, it must be **removed** from the replication before proceeding with the upgrade.

What is Changing?

We are **refactoring the SyExtendedPropertyValue table** to move away from a single, centralized structure, which currently creates opportunities for performance issues. Going forward, **dedicated tables will be created per entity** that uses extended properties.

New Format

Each new table will follow the naming pattern: **SyExtendedPropertyValue_<entityname>**. As an example, Extended properties on the course entity would now be in a table named **SyExtendedPropertyValue_course**. These tables will be visible within the data structure in Student 25.2 but will not be used, and no data will be migrated until the upgrade to Student 25.3.

Migration of Data

To ensure everyone is able to use the new extended properties architecture, we are performing an automatic migration of the existing extended properties data in your database.

As part of the Anthology Student **25.3.0 upgrade**, data will be automatically migrated from the centralized SyExtendedPropertyValue table to the corresponding new entity-specific tables. **No action is required from you during the upgrade for this part of the change**—the migration is handled entirely within the upgrade process.

Currently, the call to retrieve extended properties is made by passing the entity name and property, which are then filtered and returned from the syExtendedPropertyValue table.

As part of this refactoring, we will now intercept calls to the extended property and redirect the incoming call to the appropriate current entity based on the provided entity name. This allows us to maintain compatibility without requiring any changes to the existing incoming call structure.

What to Expect During Your Upgrade to Anthology Student 25.3.0

Upgrade Duration

The upgrade process may take longer than usual depending on your data volume. In our internal tests, migrating 50 million records took approximately 50 minutes.

What Does This Mean for You?

Student Web Application

The Student Web Application will continue to work without any changes required since the updates were made at the base implementation level.

Standard API Users

If you're using the platform's **standard APIs**, you're all set! These changes are **fully abstracted behind the API layer**, and **no code changes are needed** on your part.

For example:

- GET /api/commands/Academics/Course/Get
- Update extended properties in the response.
- POST /api/commands/Academics/Course/Sav

External Integrations Using Existing OData for Entity-Specific Extended Properties

If you are using external integration using existing OData, this will continue to work as it is. **For example:**

- GET ds/campusnexus/CourseExtendedProperties?\$filter=EntityId eq 810

Custom Report, Code & Integrations

If you have custom reports & code, that **directly reference** the SyExtendedPropertyValue table, OData EndPoint, please **review and update them** to align with the new structure. **They will no longer work with the release of Anthology Student 25.3.0**, as the extended property data has been moved into separate, entity-specific tables. Therefore, before the release of Anthology

Student 25.3 in September 2025, you must update the integration to use the individual OData model for each entity. Continuing to use the old table may result in broken functionality or inaccurate results after the upgrade. **Example Update:**

Old (Invalid):

GET ds/campusnexus/ExtendedPropertyValues?\$filter=EntityName eq 'Course' and EntityId eq 15

New (Required):

GET ds/campusnexus/CourseExtendedProperties?\$filter=EntityId eq 15

Area	Impact	Action Required
API's	No Impact	None
Customer Code Accessing SyExtendedPropertyValue directly	Direct access will break or return incorrect results post upgrade.	Review and update queries / reports accordingly.
Upgrade Duration	May increase based on Data Volume but handled by upgrade processes.	None
Data Migration	Handled automatically during upgrade.	None

Here is the complete list of new tables for each entity:

- SyExtendedPropertyValue_Agency
- SyExtendedPropertyValue_AgencyBranch
- SyExtendedPropertyValue_Applicant
- SyExtendedPropertyValue_AreaOfStudy
- SyExtendedPropertyValue_BillingTransactionCode
- SyExtendedPropertyValue_Building
- SyExtendedPropertyValue_Campus
- SyExtendedPropertyValue_Certification
- SyExtendedPropertyValue_ClassSection
- SyExtendedPropertyValue_College
- SyExtendedPropertyValue_CollegeCourse
- SyExtendedPropertyValue_Course
- SyExtendedPropertyValue_CourseBook

- SyExtendedPropertyValue_CourseBookList
- SyExtendedPropertyValue_Document
- SyExtendedPropertyValue_DocumentType
- SyExtendedPropertyValue_FundSource
- SyExtendedPropertyValue_HighSchool
- SyExtendedPropertyValue_HighSchoolCourse
- SyExtendedPropertyValue_Honor
- SyExtendedPropertyValue_Location
- SyExtendedPropertyValue_Program
- SyExtendedPropertyValue_ProgramVersion
- SyExtendedPropertyValue_RegistrationRuleWaiveRequisite
- SyExtendedPropertyValue_Room
- SyExtendedPropertyValue_Skill
- SyExtendedPropertyValue_Staff
- SyExtendedPropertyValue_StudentAcademicStatusHistory
- SyExtendedPropertyValue_StudentAccountTransaction
- SyExtendedPropertyValue_StudentAgencyBranch
- SyExtendedPropertyValue_StudentAward
- SyExtendedPropertyValue_StudentBankAccount
- SyExtendedPropertyValue_StudentCourse
- SyExtendedPropertyValue_StudentCreditCard
- SyExtendedPropertyValue_StudentEnrollmentPeriod
- SyExtendedPropertyValue_StudentGroupMember
- SyExtendedPropertyValue_StudentIndicatorDetail
- SyExtendedPropertyValue_StudentPreviousEducation
- SyExtendedPropertyValue_StudentServicesLocation
- SyExtendedPropertyValue_StudentServiceType
- SyExtendedPropertyValue_StudentSubsidiaryAccountTransaction

Here is the complete list of new Contracts created to support these tables.

- ExtendedPropertyValueApplicantEntity
- ExtendedPropertyValueAreaOfStudyEntity

- ExtendedPropertyValueBuildingEntity
- ExtendedPropertyValueCampusEntity
- ExtendedPropertyValueCertificationEntity
- ExtendedPropertyValueClassSectionEntity
- ExtendedPropertyValueCollegeEntity
- ExtendedPropertyValueCollegeCourseEntity
- ExtendedPropertyValueCourseEntity
- ExtendedPropertyValueCourseBookEntity
- ExtendedPropertyValueCourseBookListEntity
- ExtendedPropertyValueDocumentEntity
- ExtendedPropertyValueDocumentTypeEntity
- ExtendedPropertyValueFundSourceEntity
- ExtendedPropertyValueHighSchoolEntity
- ExtendedPropertyValueHighSchoolCourseEntity
- ExtendedPropertyValueLocationEntity
- ExtendedPropertyValueProgramEntity
- ExtendedPropertyValueProgramVersionEntity
- ExtendedPropertyValueRegistrationRuleWaiveRequisiteEntity
- ExtendedPropertyValueRoomEntity
- ExtendedPropertyValueSkillEntity
- ExtendedPropertyValueStaffEntity
- ExtendedPropertyValueStudentAcademicStatusHistoryEntity
- ExtendedPropertyValueStudentAgencyBranchEntity
- ExtendedPropertyValueStudentAwardEntity
- ExtendedPropertyValueStudentBankAccountEntity
- ExtendedPropertyValueStudentCourseEntity
- ExtendedPropertyValueStudentCreditCardEntity
- ExtendedPropertyValueStudentEnrollmentPeriodEntity
- ExtendedPropertyValueStudentGroupMemberEntity
- ExtendedPropertyValueStudentIndicatorDetailEntity
- ExtendedPropertyValueStudentAccountTransactionEntity

- ExtendedPropertyValueStudentPreviousEducationEntity
- ExtendedPropertyValueStudentSubsidiaryAccountTransactionEntity
- ExtendedPropertyValueBillingTransactionCodeEntity
- ExtendedPropertyValueAgencyBranchEntity
- ExtendedPropertyValueAgencyEntity
- ExtendedPropertyValueHonorEntity
- ExtendedPropertyValueStudentServicesLocationEntity
- ExtendedPropertyValueStudentServiceTypeEntity

Things to Remember for Anthology Student 25.3 upgrades:

- Before upgrading your Live or Production environment, you should check if there are references to any of the old tables within your integration
- Forms Builder forms – please check if there are references to any of the old tables within your Forms Builder form configuration
- Workflows – if there is any SQL reference to the centralized (old) table, you will need to update the workflow to reference the new entity table (or tables) based on the workflow purpose and scope.

Updated Information on What will Work with No Change as of 25.3.0:

- **With** providing a **compatibility view** that mirrors the old table structure
 - **Reading data** (i.e. SELECT queries):
Programs can ask for data (read) from **SyExtendedPropertyValue** just like before, and it will work fine.

They won't know the table changed to a view.

Updated Information on What Will Not Work with No Change as of 25.3.0:

- Providing with a **compatibility view** that mirrors the old table structure
 - **Writing data** (i.e. INSERT, UPDATE, DELETE):
If your programs try to add, change, or delete data in **SyExtendedPropertyValue**, it will NOT work.

That's because views like this do not handle writing data back to the underlying new tables.

In Short:

- **You can read from the new view, but you can't write to it.** The view is good for getting data, but not for changing data.

Action	Will it work?	Notes
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Read (SELECT)	Yes	Data comes from the view
Insert/Update/Delete	No	Not supported by the view

Additional technical details:

- We've moved from **one big SyExtendedPropertyValues table** to **separate, entityspecific tables**(e.g., CourseExtendedPropertyValue_Agency, ProgramExtendedPropertyValue_AgencyBranch ...).To avoid breaking older reports/integrations, we can provided a **compatibility view** that looks like the old table:
- **Example of a Key rule:**
 - If you include WHERE EntityName = 'Program' (or Course/Student), SQL Server only touches that one table. Performance improvements are essentially the same as going directly to ProgramExtendedProperties.
 - If you **don't** filter by EntityName, the engine must scan all the branches and that will be slower.

```

26 =====
27 */
28 CREATE OR ALTER VIEW dbo.SyExtendedPropertyValue AS
29
30 -- Agency
31 SELECT
32     Id AS SyExtendedPropertyValueId,
33     'Agency' AS EntityName,
34     EntityId,
35     SyExtendedPropertyDefinitionId,
36     StringValue,
37     DecimalValue,
38     DateTimeValue,
39     BooleanValue,
40     MultiValue,
41     DateAdded,
42     DateLstMod,
43     UserId,|
44     Ts
45 FROM dbo.SyExtendedPropertyValue_Agency
46
47 UNION ALL
48
49 -- AgencyBranch
50 SELECT
51     Id AS SyExtendedPropertyValueId,
52     'AgencyBranch' AS EntityName,
53     EntityId,
54     SyExtendedPropertyDefinitionId,
55     StringValue,
56     DecimalValue,
57     DateTimeValue,
58     BooleanValue,
59     MultiValue,
60     DateAdded,
61     DateLstMod,
62     UserId,
63     Ts
64 FROM dbo.SyExtendedPropertyValue_AgencyBranch
65
66 UNION ALL
67
68 -- Applicant
69 SELECT
70     Id AS SyExtendedPropertyValueId,

```