



EAB

# Creating Fixed Width Files for IPEDS Reporting

A Rapid Insight Deep Dive

*March 29, 2023*

# Meet Your Presenters



**Lily Brennan**

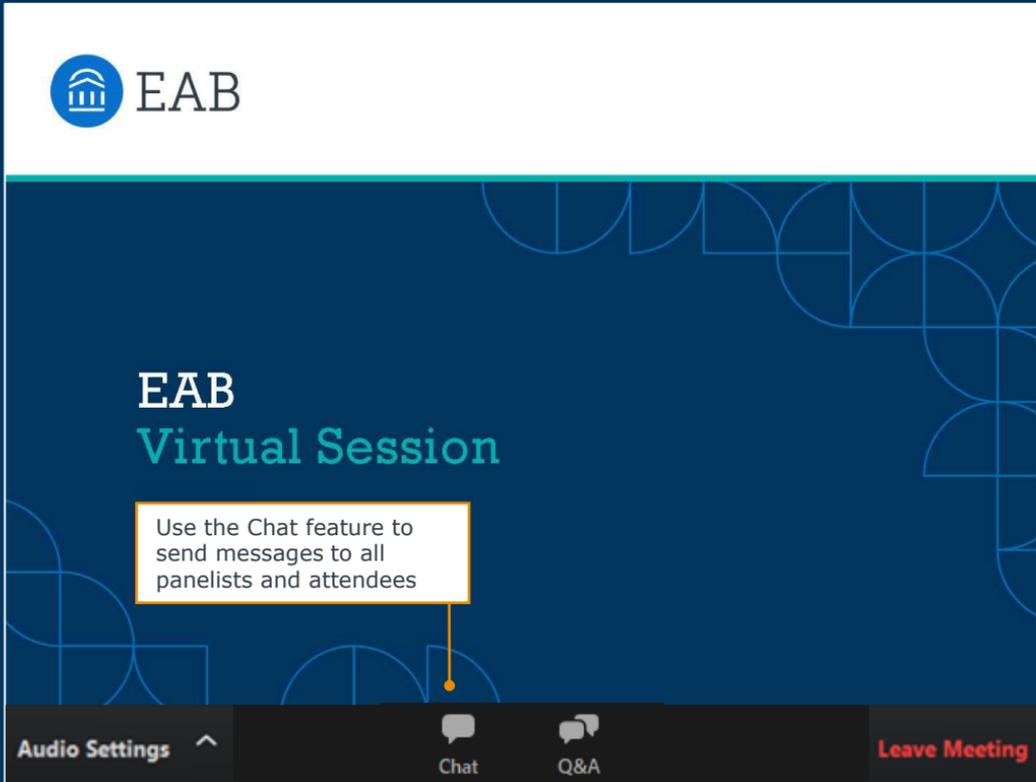
*Strategic Leader,  
Data and Analytics*



**James Cousins**

*Senior Strategic Leader,  
Data and Analytics*

# Submit a Question or Comment



The screenshot displays the EAB Virtual Session interface. At the top left is the EAB logo, which consists of a blue circle containing a white building icon, followed by the text "EAB". The main background is dark blue with a pattern of light blue geometric shapes. In the center, the text "EAB Virtual Session" is displayed, with "EAB" in white and "Virtual Session" in a light blue color. A white callout box with a yellow border and a yellow dot pointing to the Chat icon contains the text: "Use the Chat feature to send messages to all panelists and attendees". At the bottom, there is a dark grey navigation bar with four items: "Audio Settings" with an upward arrow, "Chat" with a speech bubble icon, "Q&A" with a speech bubble icon, and "Leave Meeting" in red text.

EAB

EAB  
Virtual Session

Use the Chat feature to  
send messages to all  
panelists and attendees

Audio Settings ^

Chat

Q&A

Leave Meeting

# Turn on Captions

The screenshot shows a Zoom meeting interface. At the top left, there is a white header with the EAB logo (a blue circle containing a white building icon) and the text "EAB". Below the header, the main meeting area has a dark blue background with a pattern of overlapping circles and lines. The text "EAB Virtual S" is visible in the background. A white callout box with an orange border points to a "CC" (Closed Captions) icon in the bottom center. The callout box contains the text: "Enable an automated Live Transcript – Show Subtitle or View Full Transcript". The "CC" icon is a small white square with the letters "CC" inside. Below the "CC" icon, a dark grey menu is open, showing three options: "Show Subtitle" (highlighted in blue), "View Full Transcript", and "Subtitle Settings...". At the bottom of the screen, there is a dark grey control bar. On the left, it says "Audio Settings" with an upward arrow. In the center, it says "Live Transcript" with the "CC" icon above it. On the right, it says "Leave Meeting" in red text.

EAB

EAB  
Virtual S

Enable an automated Live Transcript –  
Show Subtitle or View Full Transcript

Show Subtitle  
View Full Transcript  
Subtitle Settings...

Audio Settings ^

CC  
Live Transcript

Leave Meeting

## Quick Poll

**How long does it typically take you to complete your IPEDS or state reporting?**

- A. 1 – 10 hours
- B. 10 – 30 hours
- C. 30 – 50 hours
- D. 50+ hours

## Quick Poll

**How comfortable are you with using Construct to create fixed width files?**

- A. Very comfortable
- B. Comfortable
- C. Somewhat comfortable
- D. Uncomfortable

# 1 Common Reporting Challenges

2 Using Construct

3 Live Demonstration

4 Partner Examples

5 Audience Q & A

# Common Reporting Challenges



1

## Federal Funding Requires Data

The National Center for Education Statistics (NCES) uses the Integrated Post-Secondary Education Data System (IPEDS) to collect data.

2

## Submissions Take Time

Gathering, organizing, and submitting data consumes multiple staff positions and dozens of staff hours.

3

## Extensive Verification Needed

Manual data entry is tedious and requires an extensive verification process to ensure accuracy prior to submission.

4

## Multiple Submissions Per Year

IPEDS has three collection periods with 3-5 surveys due in each collection.



1

Common Reporting Challenges

2

**Using Construct**

3

Live Demonstration

4

Partner Examples

5

Audience Q & A



Direct Connection  
to Data Sources



**Ways to Use  
Construct**



Re-use workflows  
each year



Streamline Data



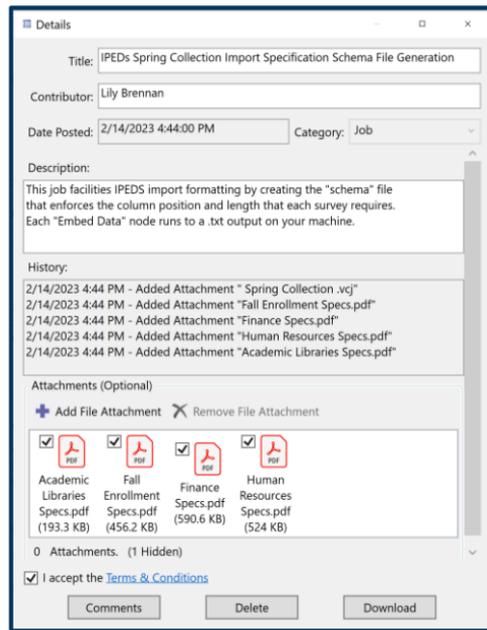
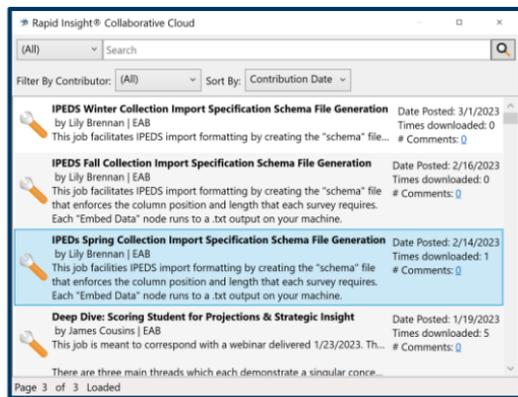
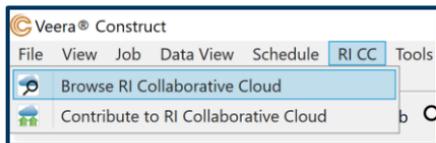
Create a Fixed  
Width Output File  
for data upload



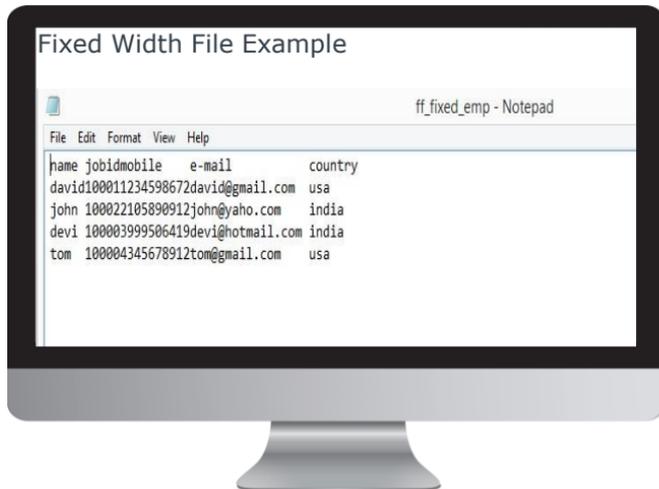
Use jobs available in  
RI Collaborative  
Cloud

# Rapid Insight Collaborative Cloud

Open the "IPEDS Spring Collection Import..." Job to Follow Along



# What Is a Fixed Width File?



A text file that is arranged so that each column has a specified width.

- ✓ No delimiters used to separate fields
- ✓ The width of each column is known
- ✓ The position where each column begins and ends is known
- ✓ A schema is used to create the file

# What Is a Schema File?

**IPEDS 2022-23 Import Specifications: Fall Enrollment**  
**Applies to: 4-year, degree-granting institutions**  
**File type: Fixed Length/Positional (\*.txt)**

Field ID (Key)	Column	Length	Data type	Description
<b>Count by R/E: Fall Enrollment by Student Level, Attendance Status, Race/Ethnicity, and Gender</b>				
UNITID	1	6	N	UNITID
SURVSECT	7	3	AN	Survey Section
PART	10	1	AN	Part of survey section - Race/ethnicity and Gender
CIPCODE	11	7	AN	Classification of instructional program (CIP) code
LINE	18	2	AN	Student level
EFRACE01	20	6	N	U.S. Nonresident - Men (1)
EFRACE02	26	6	N	U.S. Nonresident - Women (2)
EFRACE25	32	6	N	Hispanic/Latino - Men (25)
EFRACE26	38	6	N	Hispanic/Latino - Women (26)
EFRACE27	44	6	N	American Indian or Alaska Native - Men (27)

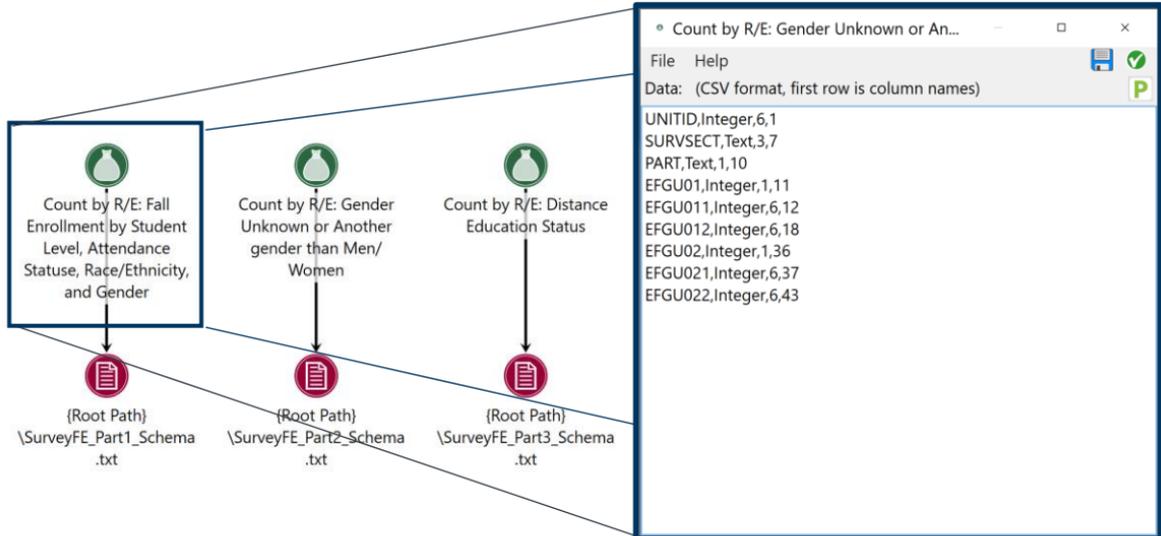
A schema describes the structure of a data file.

Requirements for a schema file:

- Column title
- Column starting position
- Length of field in number of characters
- Data type of field

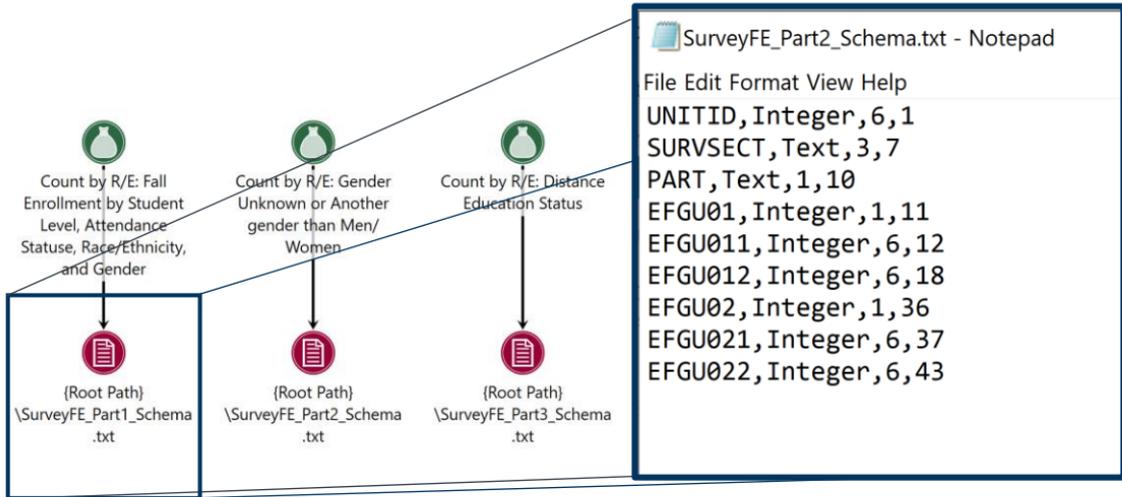
# How to Create Schema Files with Construct

## Using an Embed Data Node to Create a Schema



# How to Create Schema Files with Construct

## Schema File Output

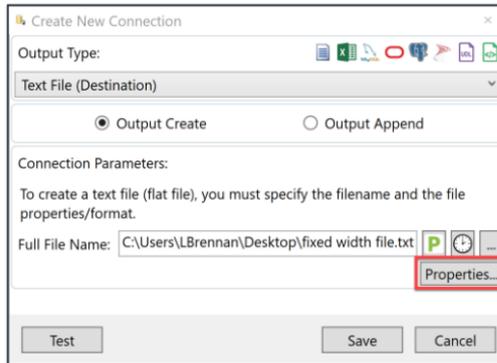


# Using Schema Files to Create Fixed Width Output

16

## Configuring Fixed Width Schema in File Properties

1. Properties
2. Fixed Width
3. Advanced
4. Next
5. Import
6. Browse to schema file
7. Import
8. Next
9. Finish
10. Save
11. Run



The screenshot shows the 'Create New Connection' dialog box. The 'Output Type' is set to 'Text File (Destination)'. The 'Output Create' radio button is selected. The 'Full File Name' is 'C:\Users\LBrennan\Desktop\fixed width file.txt'. A red box highlights the 'Properties...' button.



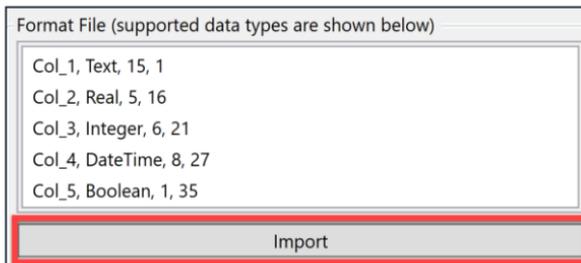
The screenshot shows the 'Fixed Width' configuration dialog box. The 'Fixed Width' radio button is selected. The 'Field Delimiter' section is visible, with 'Comma' selected. The 'First Row Contains Field Names' checkbox is checked. A red box highlights the 'Fixed Width' radio button.

# Using Schema Files to Create Fixed Width Output



## Configuring Fixed Width Schema in File Properties

1. Properties
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# Using Schema Files to Create Fixed Width Output

## Configuring Fixed Width Schema in File Properties

1. Properties
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3. Advanced
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Format File Properties

Name: C:\Users\L.Brennan\Desktop\SurveyFE\_P... format file field delimiter:

Format file example: (all supported data types are shown)

Col\_1,Text,15,1  
Col\_2,Real,5,16  
Col\_3,Integer,6,21  
Col\_4,DateTime,8,27  
Col\_5,Boolean,1,35

Format file structure:

Field 1	Field 2	Field 3	Field 4
Column Name	Data Type	Field Length	Starting Column

Column Name	Data Type	Field Length	Starting Column
INUNITID	Integer	6	1
SURVSECT	Text	3	7
PART	Text	1	10
EFGU01	Integer	1	11
EFGU011	Integer	6	12
EFGU012	Integer	6	18
EFGU02	Integer	1	36
EFGU021	Integer	6	37
EFGU022	Integer	6	43

Import Cancel

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3 **Live Demonstration**

4 Partner Examples

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## Live Demonstration

1

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**Partner Examples**

5

Audience Q & A



## IPEDS Completion Survey

PROBLEM ▶

SOLUTION ▶

IMPACT ▶



### Time Intensive Process

- 40 hours of work
- 2-3 people required for verification
- Tedious manual entry into IPEDS
- Errors in data entry found during verification process

1

### Rapid Insight Automation

Use of Construct to generate schema files. Separation of data into specific categories streamlined.

2

### IPEDS File Import

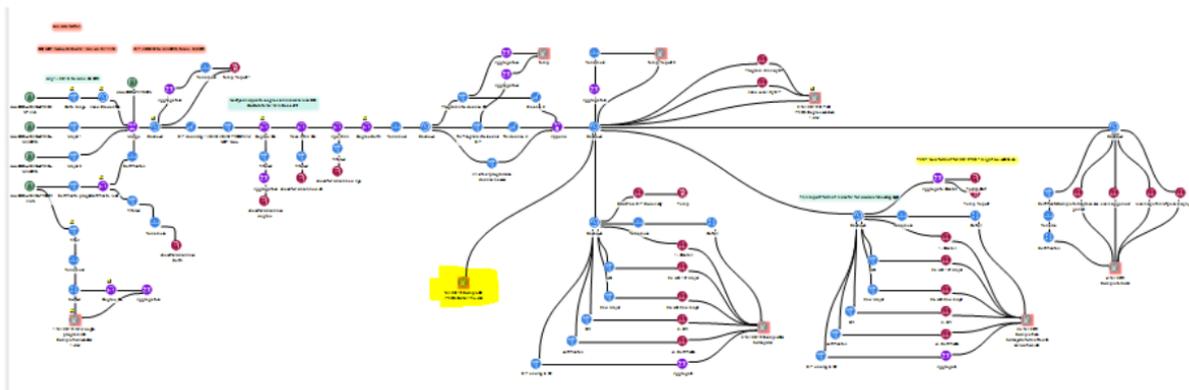
Construct job developed to format data and create a compatible file to upload to IPEDS.



### Time Reduction

- 75% reduction in time required to prepare report
- 30 hours saved
- 2 staff members freed up to work on other institutional priorities
- Data validation is faster and easier
- No user error when entering data

## Preparing the Data



**“Completers IPEDS Detail File”**  
became the source file for the File Import Jobs



## IPEDS Completion Survey

PROBLEM ▶

SOLUTION ▶

IMPACT ▶



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### IPEDS File Import

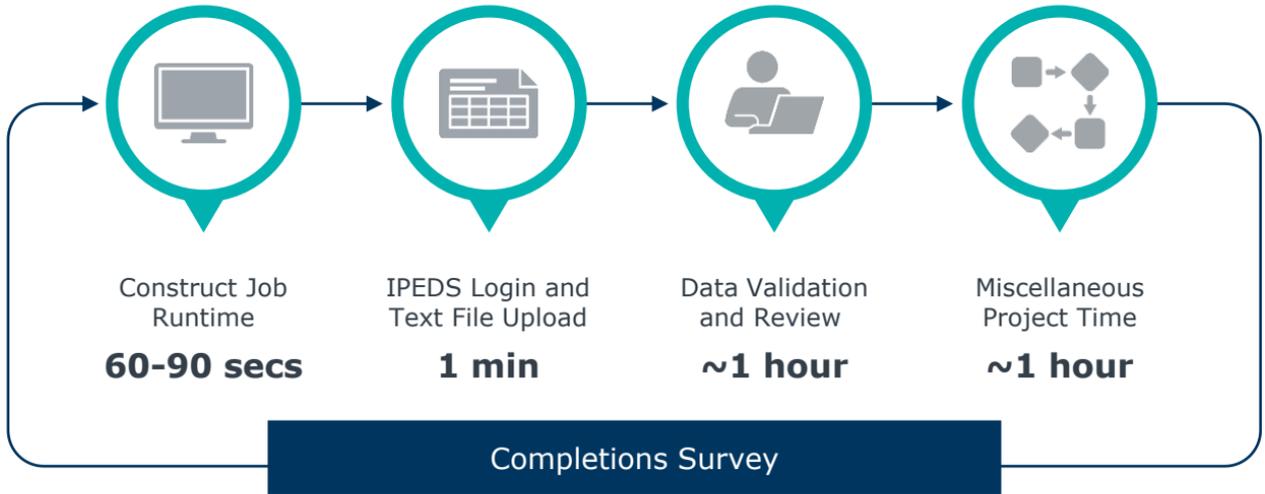
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### Time Reduction

- 75% reduction in time required to prepare report
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## IPEDS Submission Using Construct



**17** hours on average **before** to complete submission

**90%** time savings **after** new process of ~2 hours

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# Submit a Question Using the Q&A Button

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*Senior Strategic Leader,  
Data and Analytics*



Additional Questions?

Email [RI-Support@eab.com](mailto:RI-Support@eab.com) with technical questions  
and [RapidInsight@eab.com](mailto:RapidInsight@eab.com) for all other inquiries.

<https://support.rapidinsight.eab.com/hc/en-us>

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Guide admin

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Lily Brennan

Search

### Construct

**Module Overview**  
Learn about the Construct module, including its tabs, toolbar, and nodes.

**Tool Actions**  
Explore how to perform actions with jobs, connections, and nodes.

**Software Setup and Security**  
Learn about software setup and security standards.

### Predict

**Module Overview**  
Learn about the Predict module, which allows users to create predictive models to support their work.

**Tool Actions**  
Explore how to perform actions with the Workspace and Analysis tabs in Predict.

**Software Setup and Security**  
Learn about software setup and security standards.



## Monthly Office Hours

Thursday, April 20<sup>th</sup>  
1:00-1:30 PM EST  
[Register Online](#)



## Email

RI-Support@eab.com



## Help Center

Submit a request

## Quick Polls

**1 How comfortable are you with using Construct to create fixed width files now?**

- A. Very comfortable
- B. Comfortable
- C. Somewhat comfortable
- D. Uncomfortable

**2 How was today's session?**



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