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Errors are Data. Data is good.
Errors are good?

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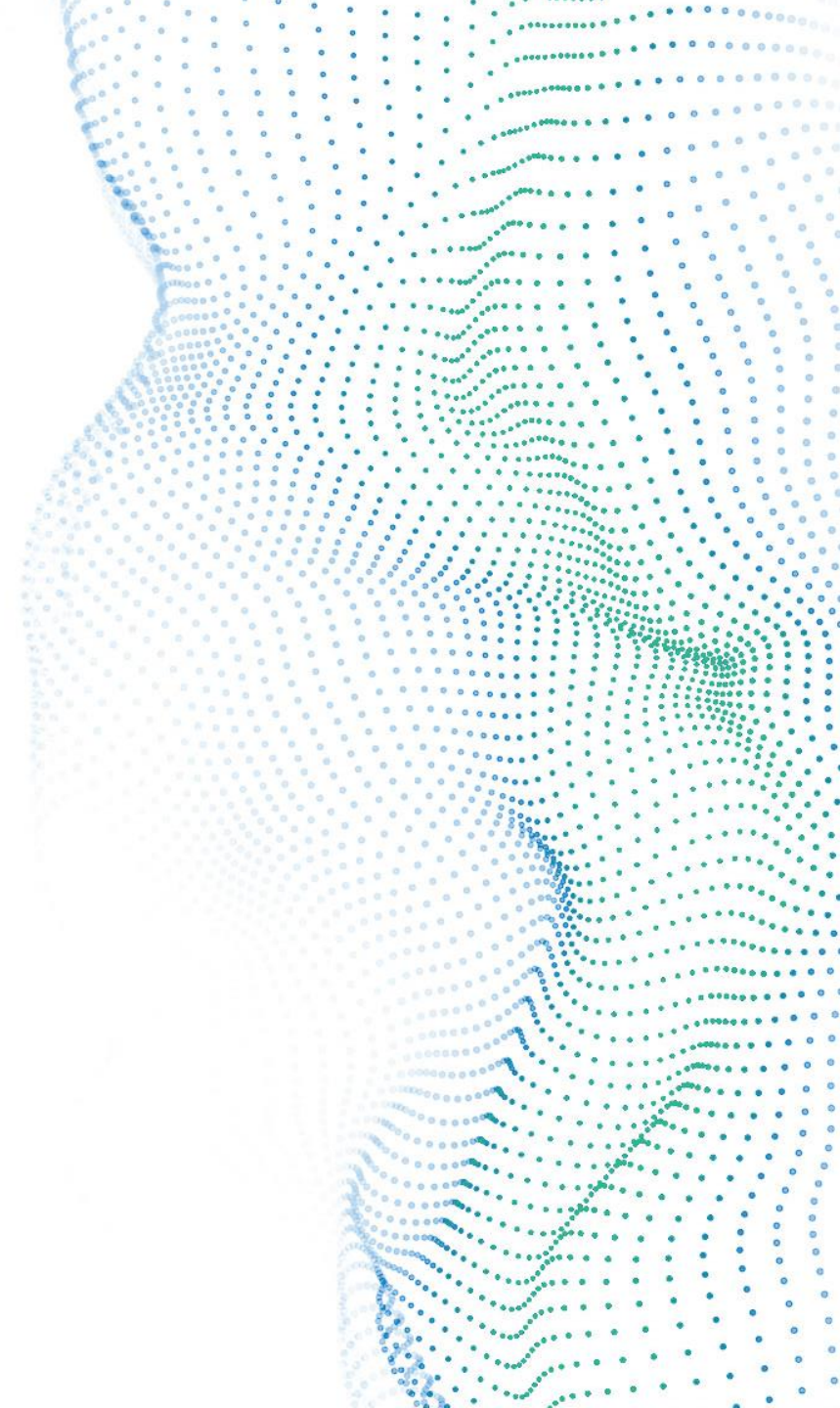
How can errors be "good"?

They provide data and control

- Data: Help users during the design/build process
  - Improvement from "Chaos reigns within. Reflect, repent, and restart. Order shall return."?

- Data: Create custom errors for tailored information

- Control: Ensure macros/wizards are used as intended

- Control: Prevent undesirable results

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Get the data

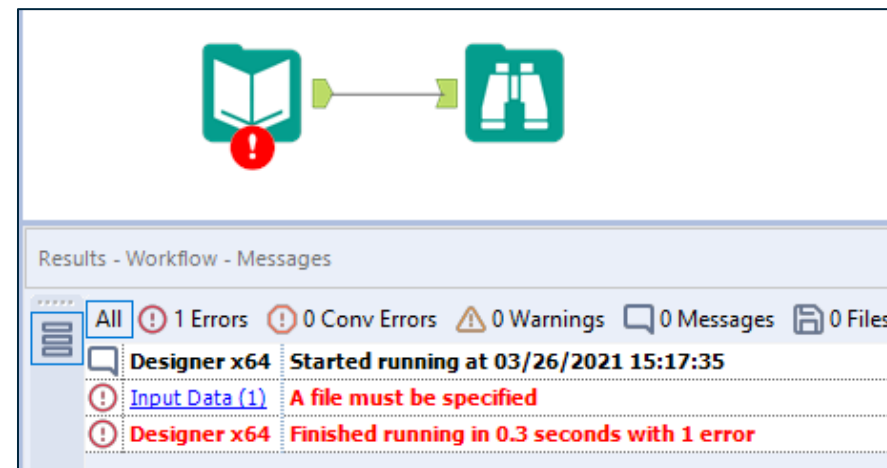alteryx

Get the data

Where

- Results Window

- Tool Annotation on canvas

- Logging

- Debug Mode
  - Run the macro/app as a workflow
  - Separate window for UI errors

What

- Tool ID (in order of macro nesting)

- Error message
  - Expression #

Tips

- Address errors sequentially (start at top)

- Click Results window link to find tool

- Right-click > Copy Selected (use to search)

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Avoid Common Errors

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Avoid Common Errors

- Field Types
  - https://help.alteryx.com/current/designer/data-types

- Datum Values
  - Null / Empty / 0 / SpatialType-None

- Field Schemas
  - Transpose Tool and other transformations

Tips

- Use ToNumber(and ToString(in formulas

- Multi-Field Formula to change type
  - Pairs well with Dynamic Select for name-based conversions

- Avoid AutoField when sampling
  - Select field types doesn't hold types unless changed or ": Forced"

- Data Cleanse Tool

- Field Info: Spatial Object Type

- CReW macro: Ensure Fields

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Avoid Common Errors

- Dependencies
  - Check before moving or sharing!
  - Options > Advanced Options > Workflow Dependencies
    - Relative References How-To

Tips

- Dependency Test button!

- UNC paths ("Universal Naming Convention")

- Check resource permissions (different users and Alteryx Service)

- Alias are user-specific and don't share well

- Use .indbc files for In-DB connections

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Make MORE Errors

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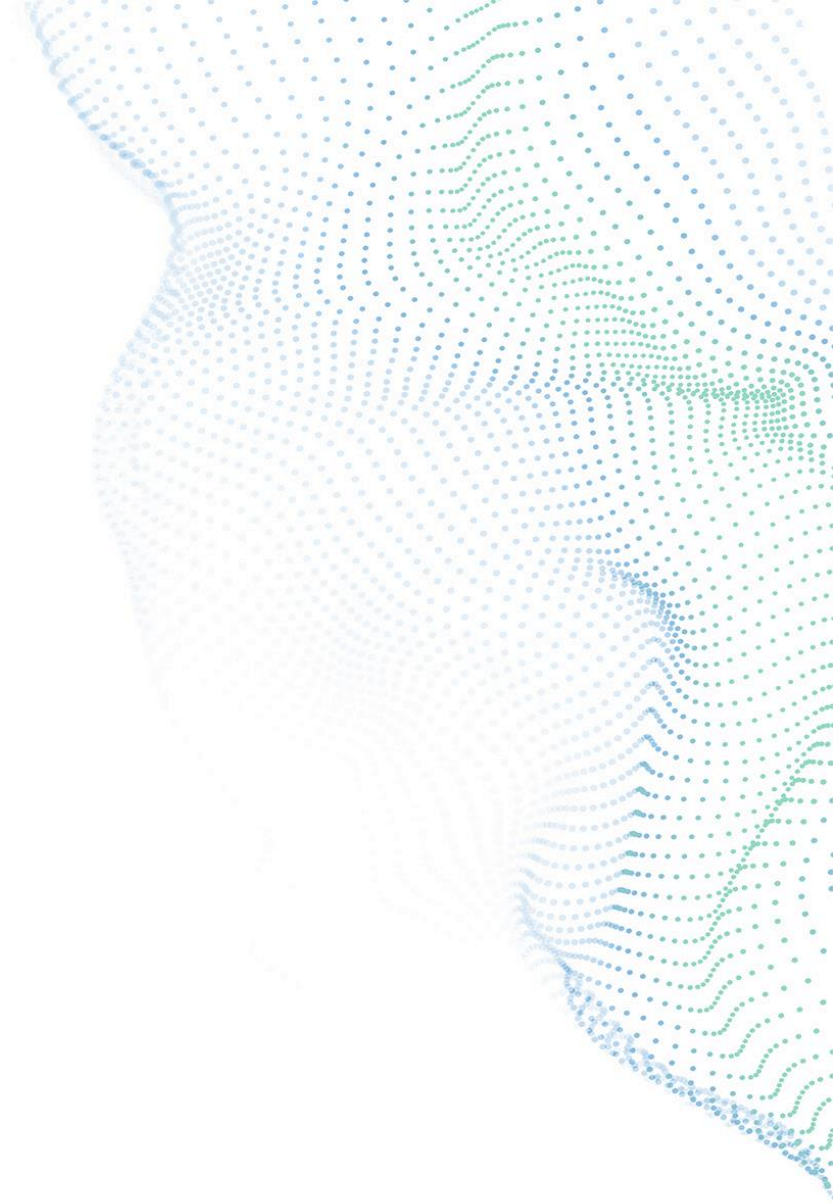
Make MORE Errors
in all the right places

- Test tool

- Message tool

- Message function in Formula tool
  - Message(messageType, message, returnValue)

- Error Message (Interface tool)

Tips

- **A record is required to test**
  - Count Records tool
    - CReW macro: Expect Zero Records
  - Union a dummy record

- Error Message: use RegEx!

- Use errors to trigger other events: Email / Run Command
 - Workflow Configuration -> Events

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Ambiguous Errors

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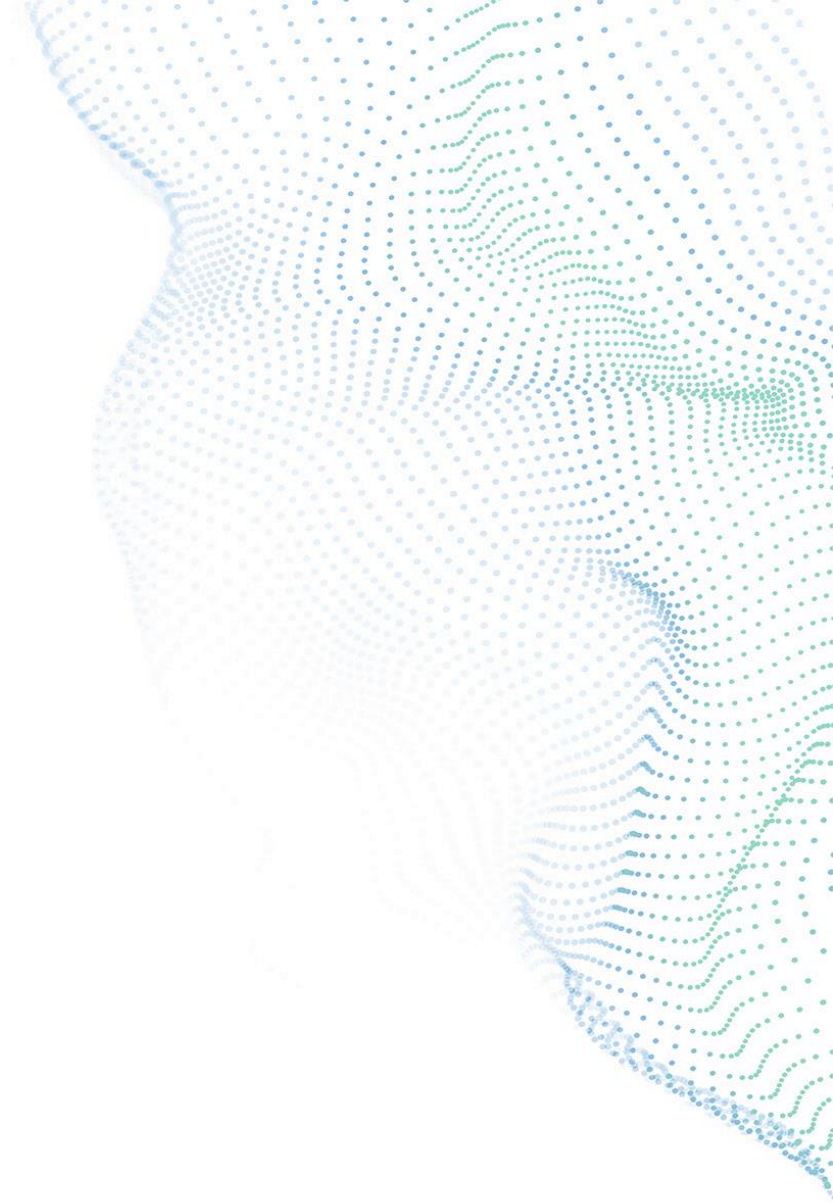
Ambiguous Errors
Ambiguous Tips

- "an unknown error occurred in" II_PushRecord / II_Close / PI_PushAllRecords

  - Typically, a memory/data size error. Try to make the data/field schema/workflow smaller and more efficient or try a sample.

  - Not to be confused with sort/join memory warning or ran out of disk space.

- "Inbound Pipe Error"

  - In other words: an error occurred in an upstream tool that wasn't caught.

  - Reverse container method to isolate (work backwards putting tools in a disabled container)

- R tools

  - Standard Alteryx R tools (where the messages are nonsensical): Typically, due to improper field values (null/empty, 0, etc.)

  - Custom R tool: a good idea to add "gc()" (garbage collection) at the end of custom R code to help with unusual.

- Other unusual cases

  - Replace the tool sometimes does the trick (especially the Union tool).

- "You have found a bug. Replicate, then let us know. We shall fix it soon."

  - Formerly known as "Chaos reigns within. Reflect, repent, and restart. Order shall return."

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When all else fails
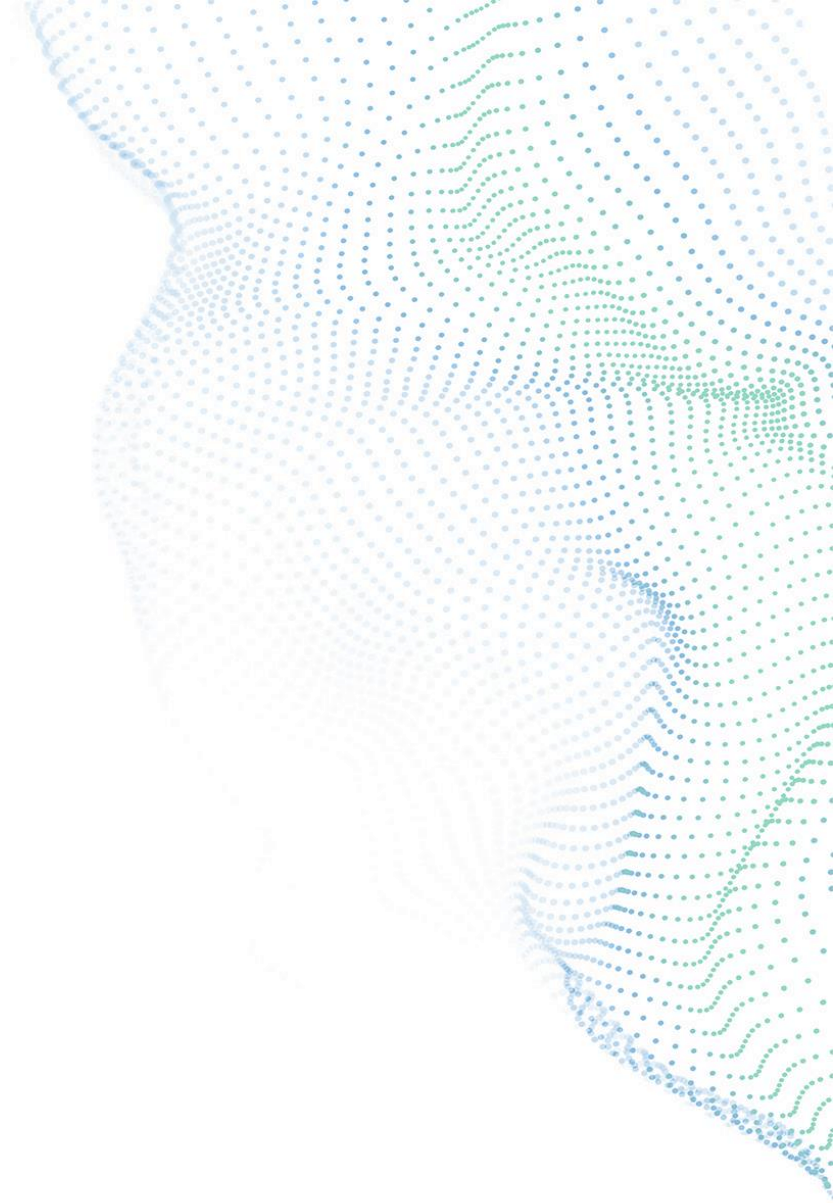
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When all else fails

Search the Alteryx Community

- Search for posts with the same error message.
  - You're not alone! There's usually at least one post

- Start a post asking for insight.
  - Include supporting materials when possible

- Submit a product Idea
  - Could an error have a better description?

Submit a ticket to Alteryx Support

- support@alteryx.com
  - Alteryx Version:
  - Server (Y/N):
  - Admin/Non-Admin (A/NA):
  - Workflow Attached (Y/N):
  - Logs Attached (Database, Engine, etc.) (Y/N):
  - Can reproduce behavior (Y/N):
  - If Yes, what are steps to reproduce:

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Thank you

Go forth and make errors

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