What’s New in Attribute Rules

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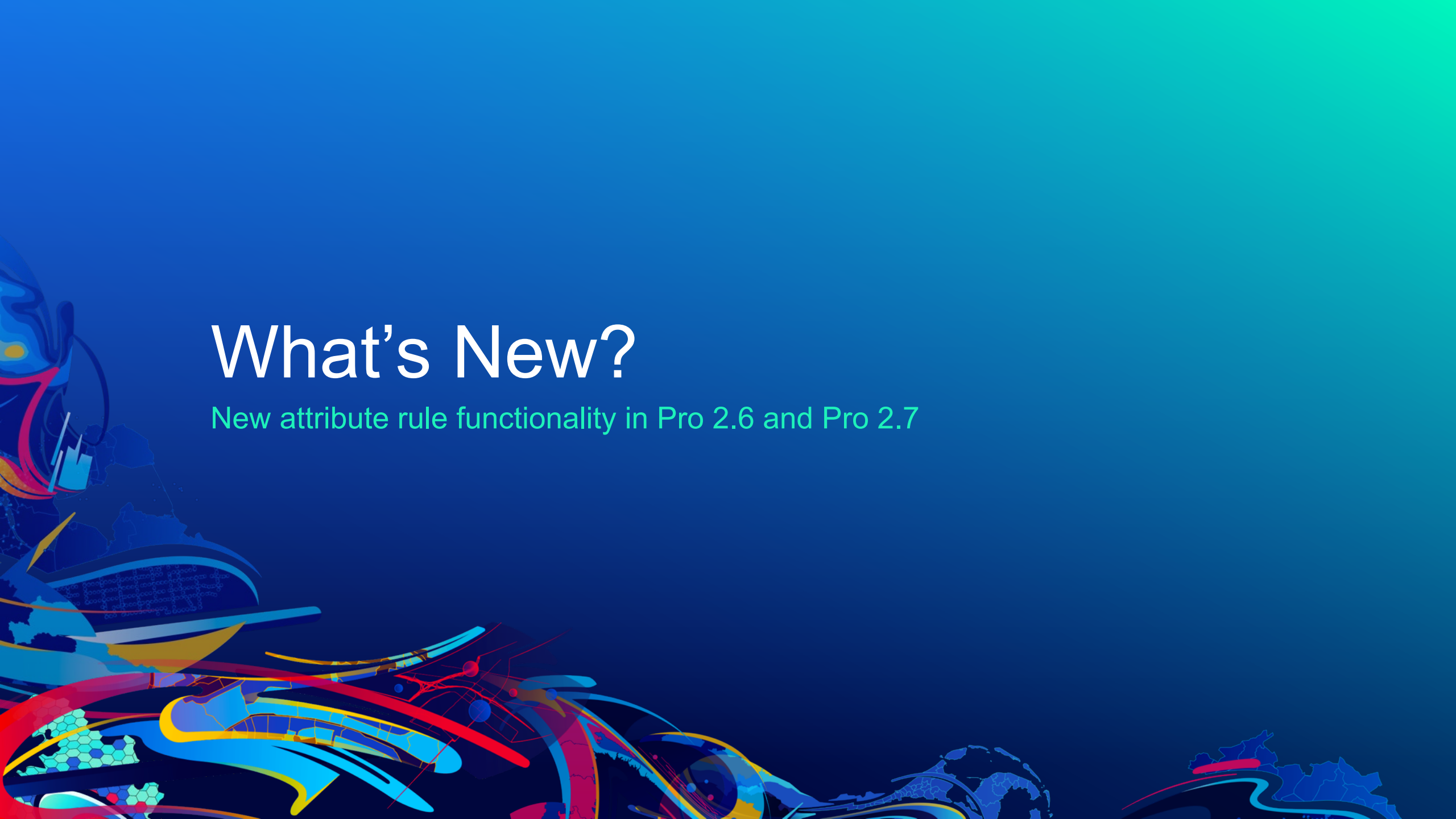
DEVELOPER SUMMIT

What’s New?

New attribute rule functionality in Pro 2.6 and Pro 2.7

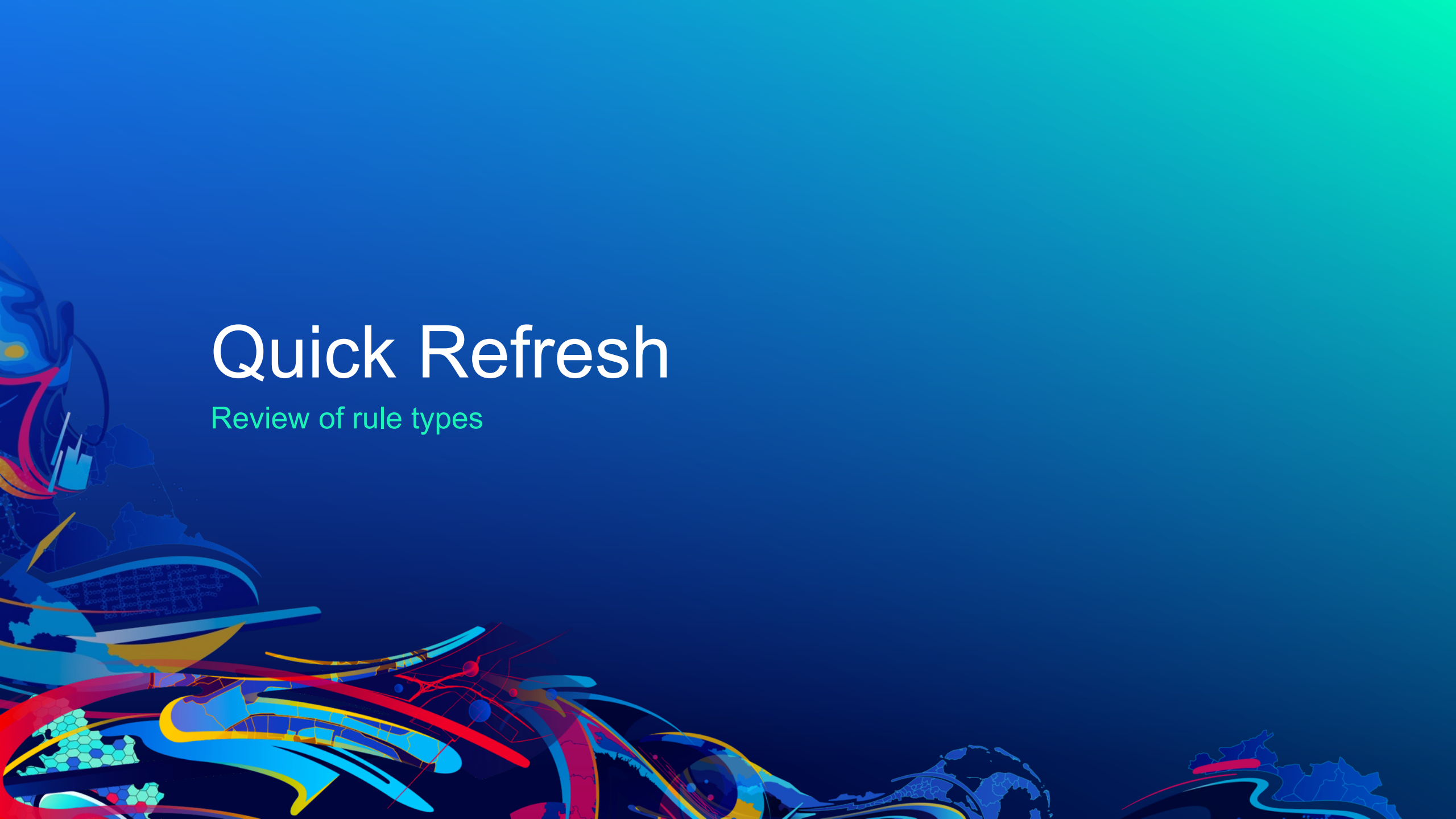


What's New in Attribute Rules

- New Arcade Globals and Functions
  - $editContext, gdbVersion, getUser
- Allow Attribute Rule to update Shape field
- Batch Calculation Rules on FileGDB
- Updating multiple fields with a single Attribute Rules
- Create, Update and Delete Utility Network Associations with ^UN_Associations
- Attribute Rules Diagnostics to identify slow Rules

Quick Refresh

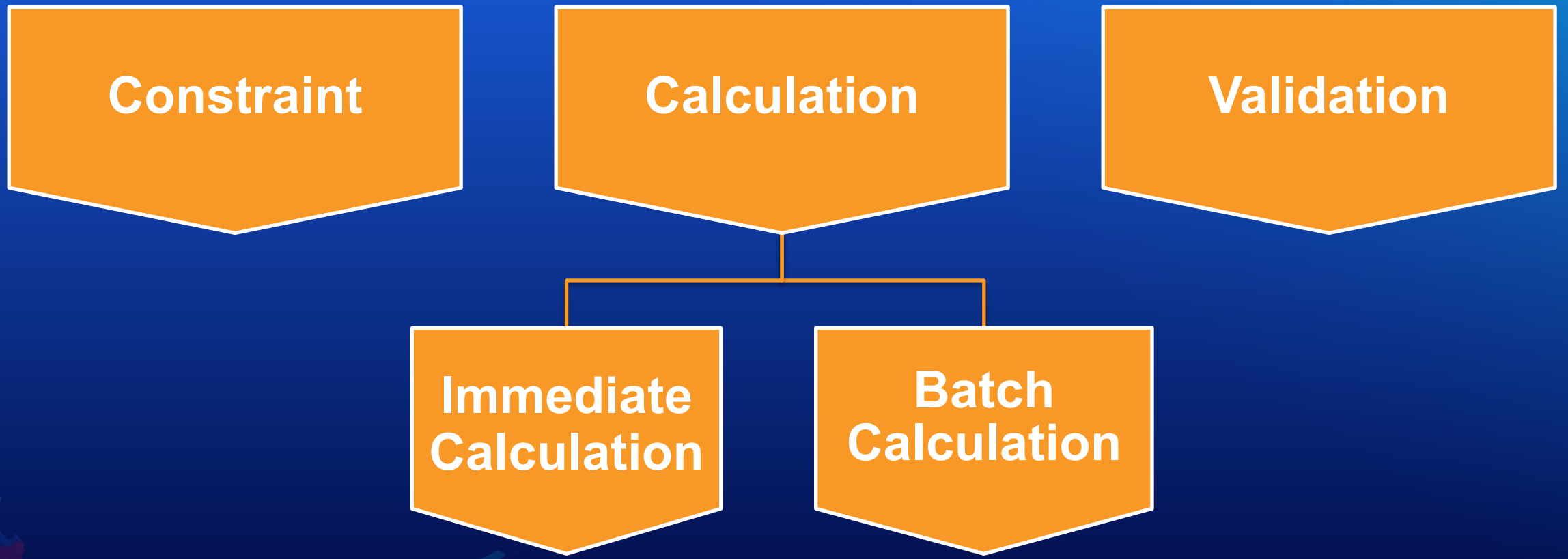
Review of rule types



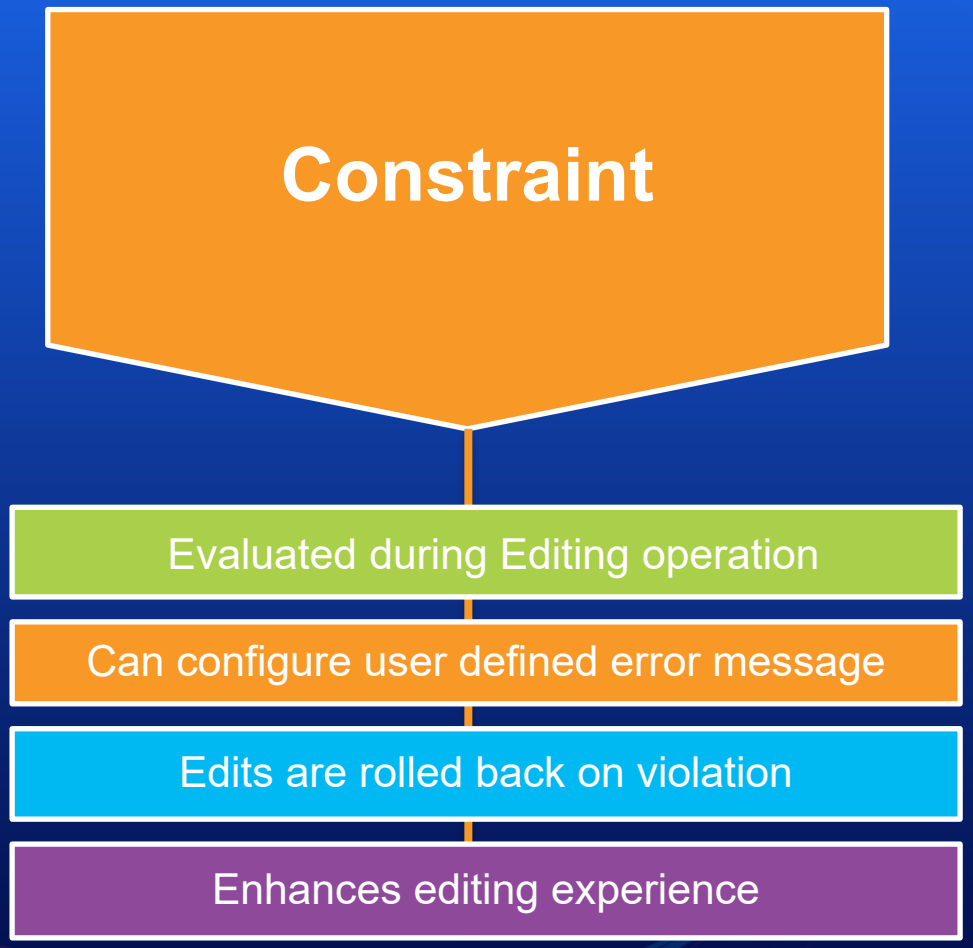
Attribute Rules

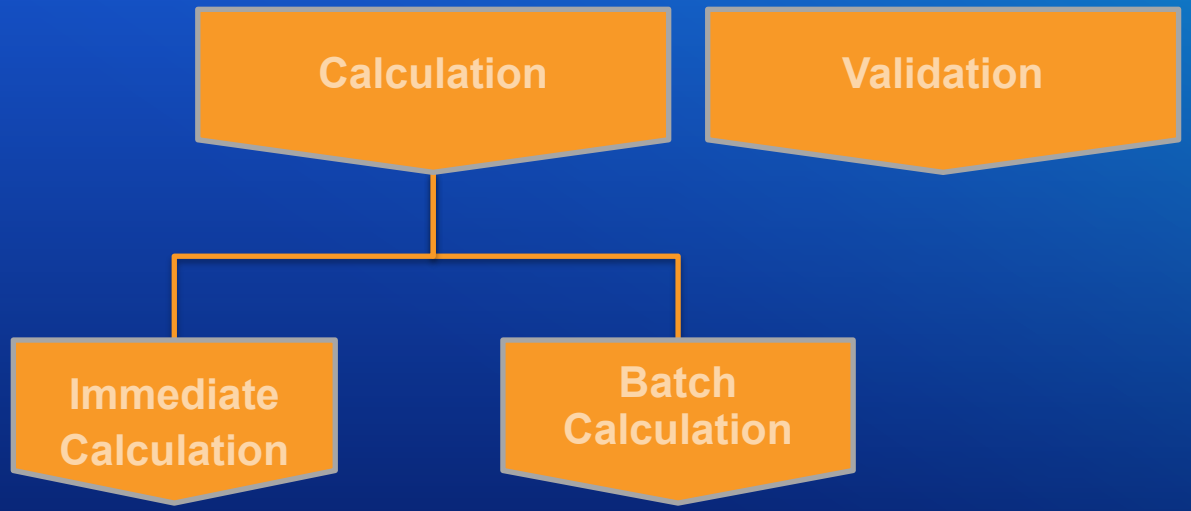
- Built-in geodatabase functionality
- Data Entry
  - Populate attributes
  - Restrict invalid edits
- Data Review
  - Generate errors on invalid existing features
- Introduced in ArcGIS Pro 2.1
- Use Arcade to configure rules
  - Keep Arcade version matrix in mind

Attribute Rule Types

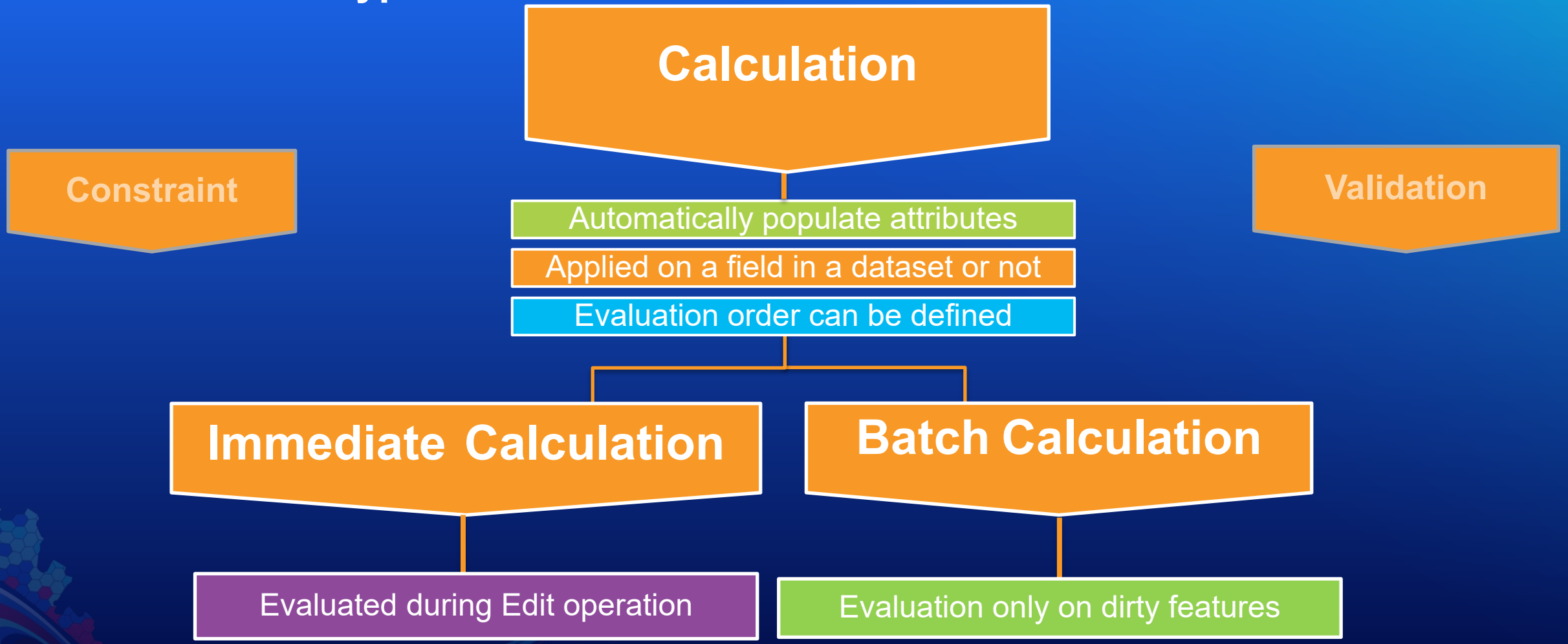


Attribute Rule Types

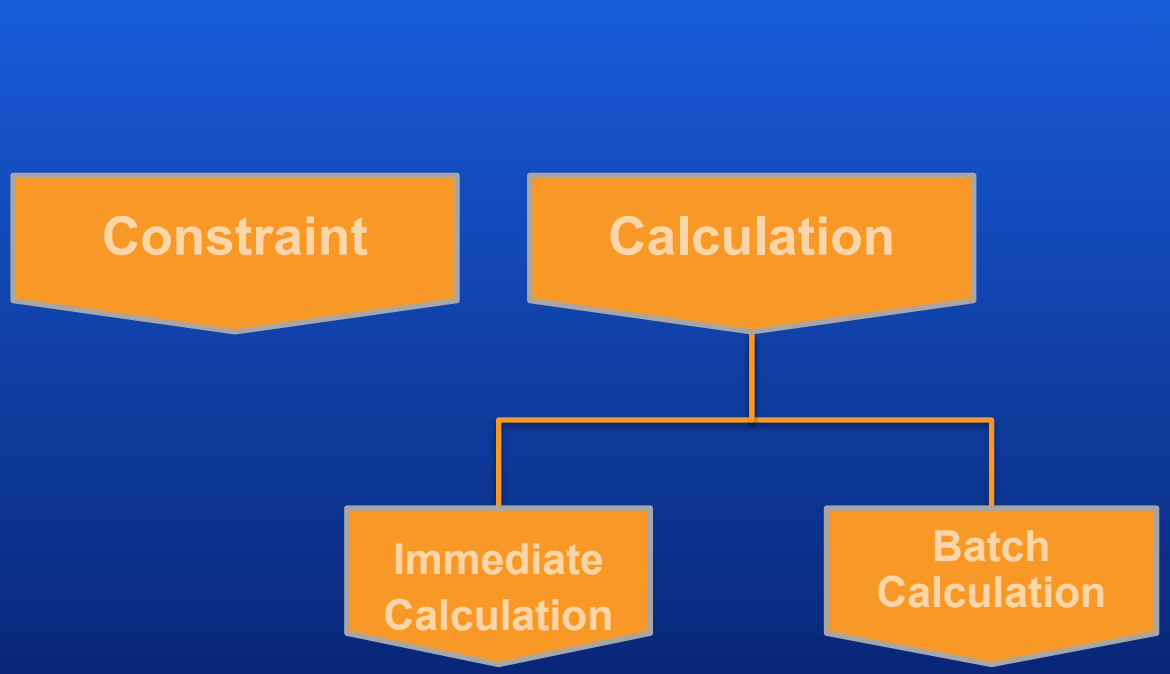


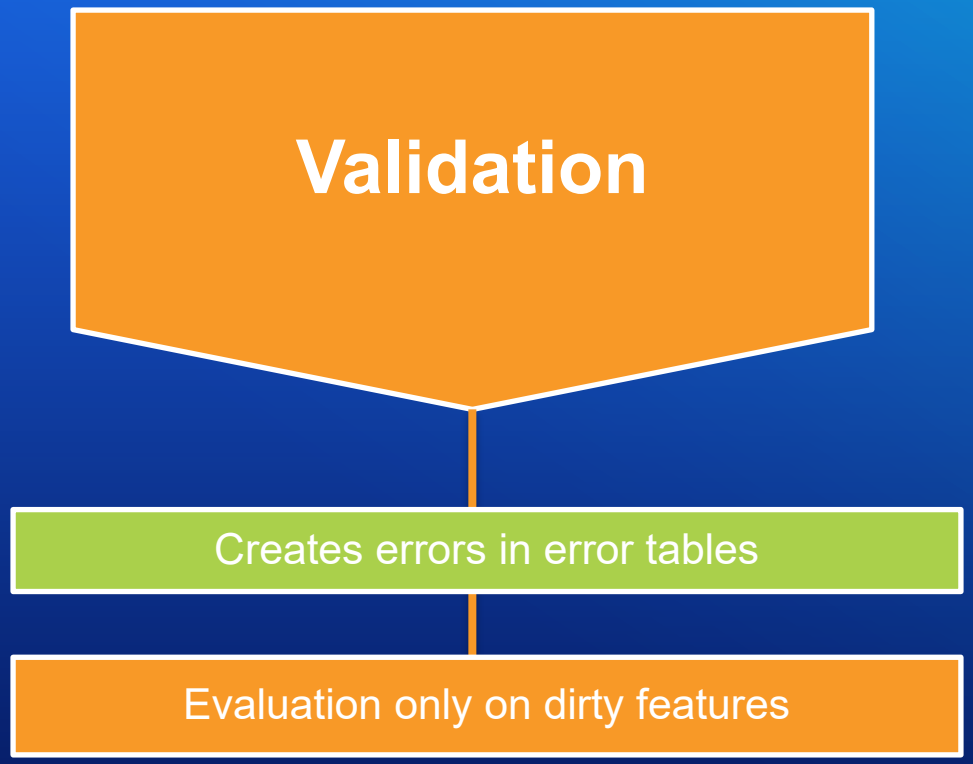


Attribute Rule Types



Attribute Rule Types





Best practices writing Arcade for Attribute Rules

Know what Arcade really does and make your rules perform better

Best Practices writing Arcade in Attribute Rules

- When using ***FeatureSetByName*** only retrieve fields and geometry if needed
- Avoid calling ***Count*** on featuresets to check if they are empty, iterate through the featureset instead
- Write less attribute rules, the more rules you have the higher the overhead. Use multi-field AR and $editContext to group attribute rules
- When applicable, move complex immediate calculation and constraint rules to batch calculation and validation to increase editing throughput.

Best Practices writing Arcade in Attribute Rules

```
var fsDevice = FeatureSetByName($datastore, "Device", ["*"], true);
var fsBreakers = Filter(fsDevice, "TYPE = 3");
var globalIds = []
var c = 0;
for (var b in fsBreakers)
  globalIds [c++] = b.globalId;
```

```
var fsDevice = FeatureSetByName($datastore, "Device", ["globalid"], false);
var fsBreakers = Filter(fsDevice, "TYPE = 3");
var globalIds = []
var c = 0;
for (var b in fsBreakers)
  globalIds [c++] = b.globalId;
```

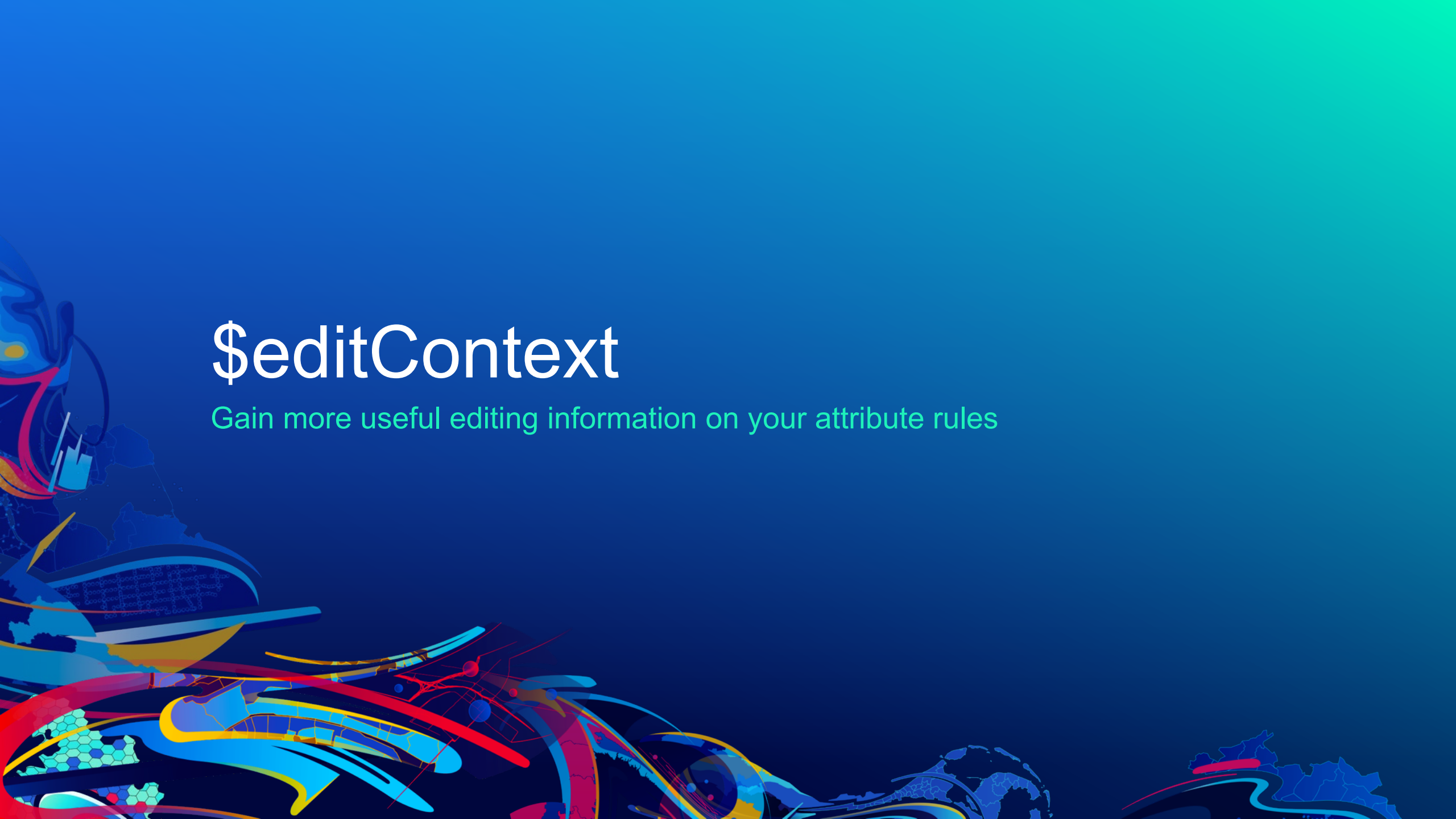
Best Practices writing Arcade in Attribute Rules

```
var fsDevice = FeatureSetByName($datastore, "Device", ["globalid"], false);
var fsBreakers = Filter(fsDevice, "TYPE = 3");
if (Count(fsBreakers) == 0 ) return;
var globalIds = []
var c = 0;
for (var b in fsBreakers)
  globalIds [c++] = b.globalId;
```

```
var fsDevice = FeatureSetByName($datastore, "Device", ["globalid"], false);
var fsBreakers = Filter(fsDevice, "TYPE = 3");
var globalIds = []
var c = 0;
for (var b in fsBreakers)
  globalIds [c++] = b.globalId;
if (c == 0) return;
```

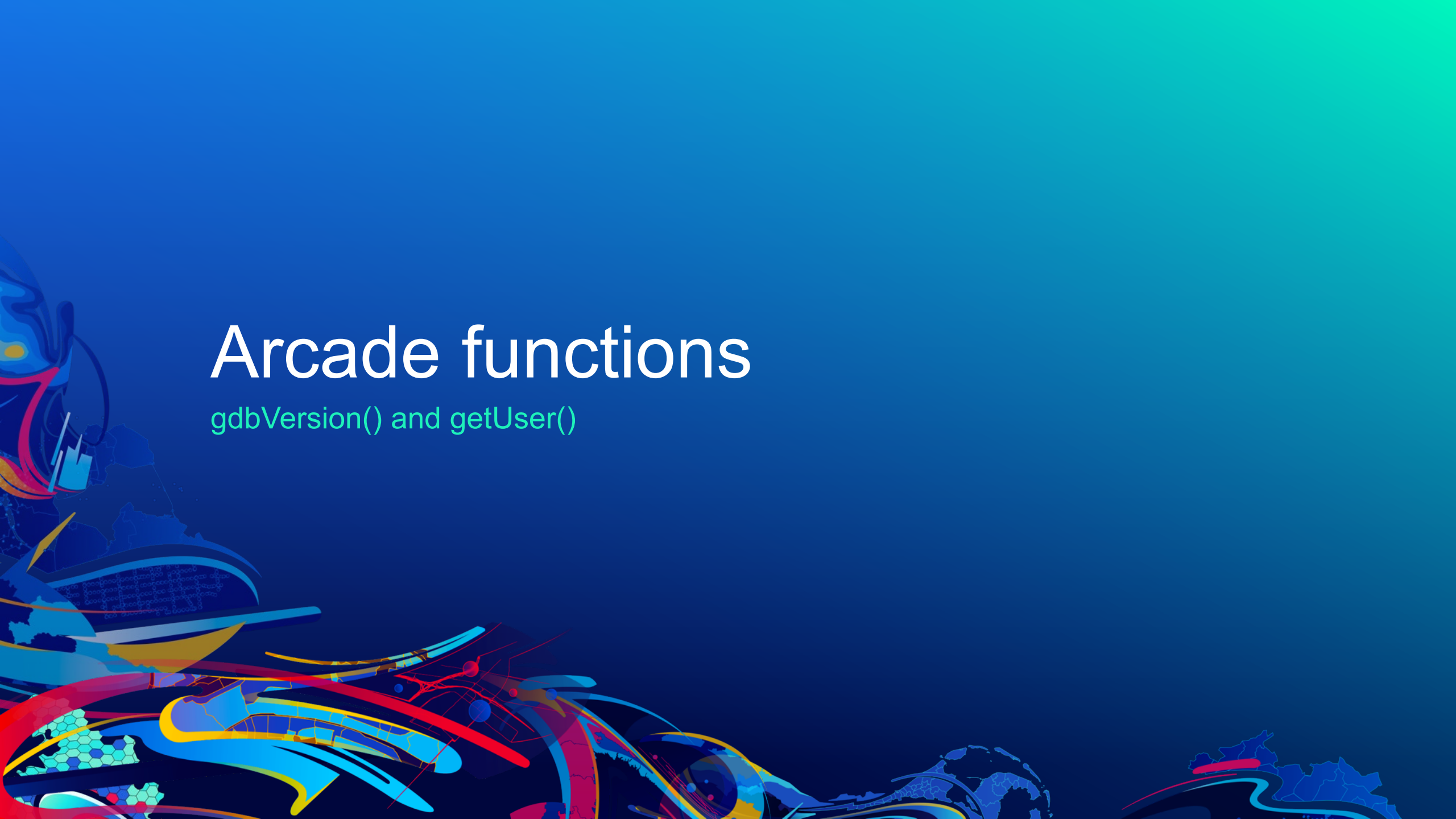
$editContext

Gain more useful editing information on your attribute rules



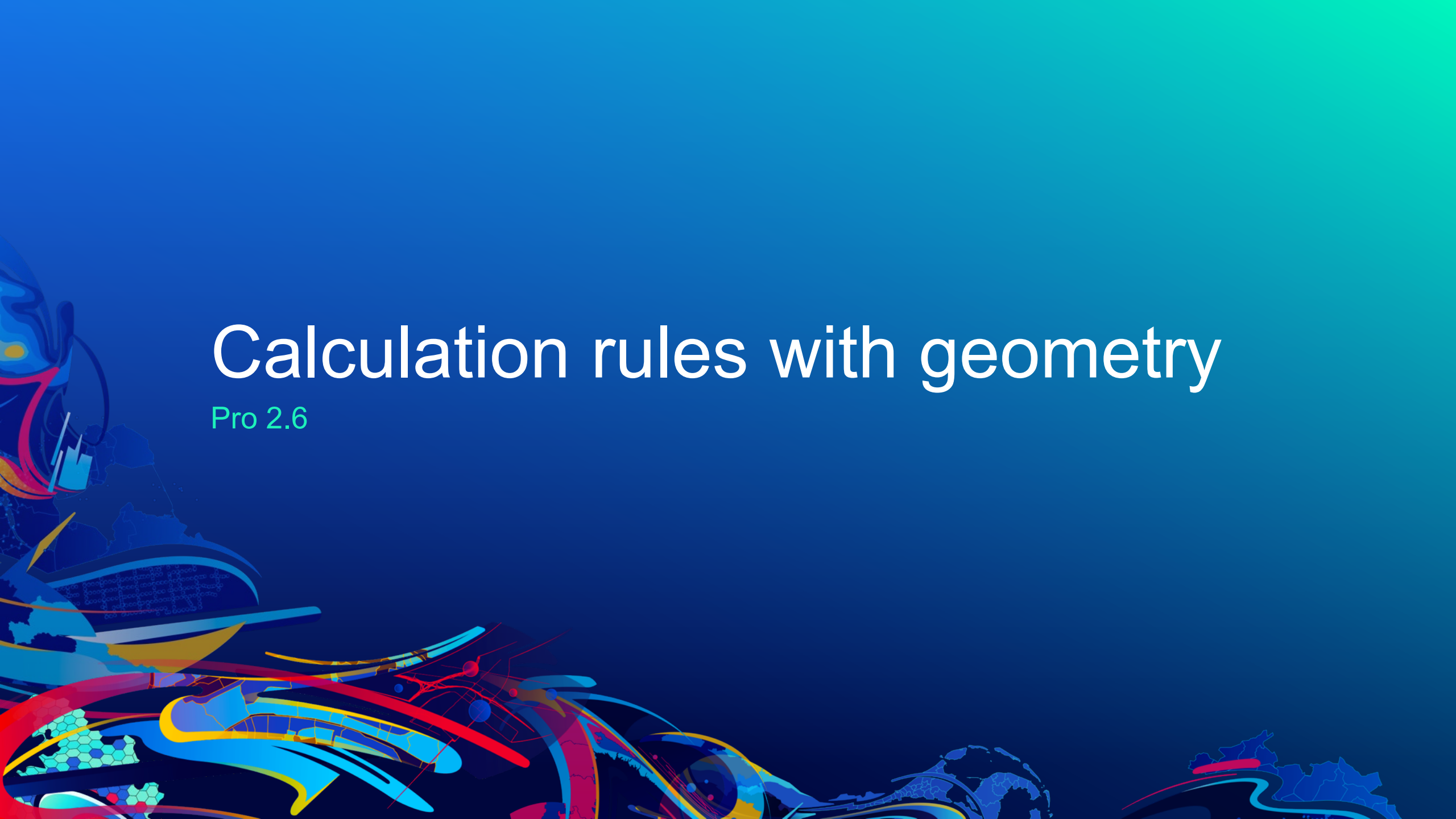
Arcade functions

gdbVersion() and getUser()



Calculation rules with geometry

Pro 2.6



Evaluating in file geodatabase

Batch calculation and validation rules in a file geodatabase

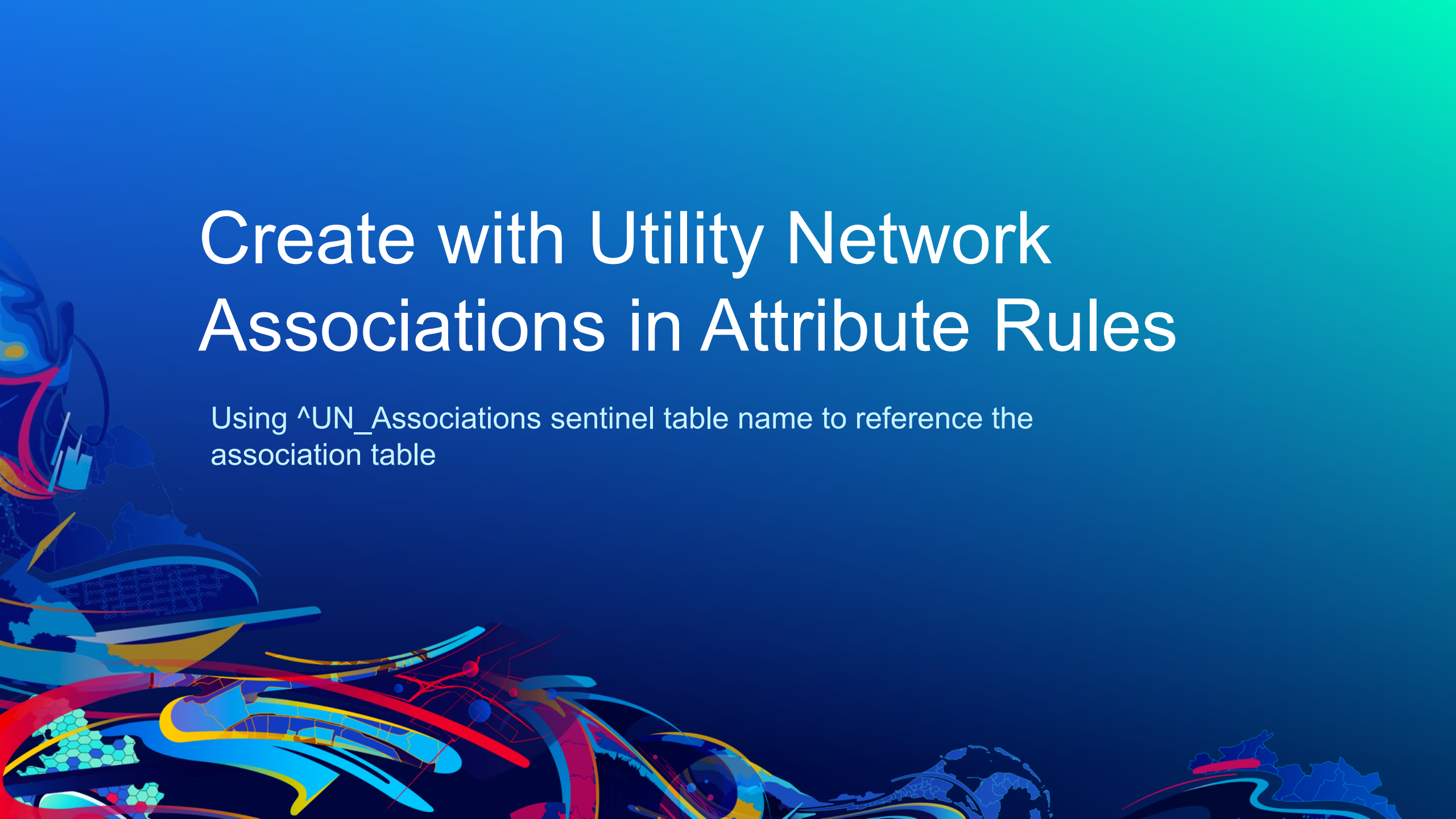
Pro 2.7

Multi-field editing

Edit multiple fields with one calculation rule

Create with Utility Network Associations in Attribute Rules

Using ^UN_Associations sentinel table name to reference the association table



Attribute Rules Diagnostics

Find slow running attribute rules

Wrap-up

What's new in Attribute Rules

Source Code

You can get access to the data and code in this repro

https://github.com/esridevsummit/attributerules2021