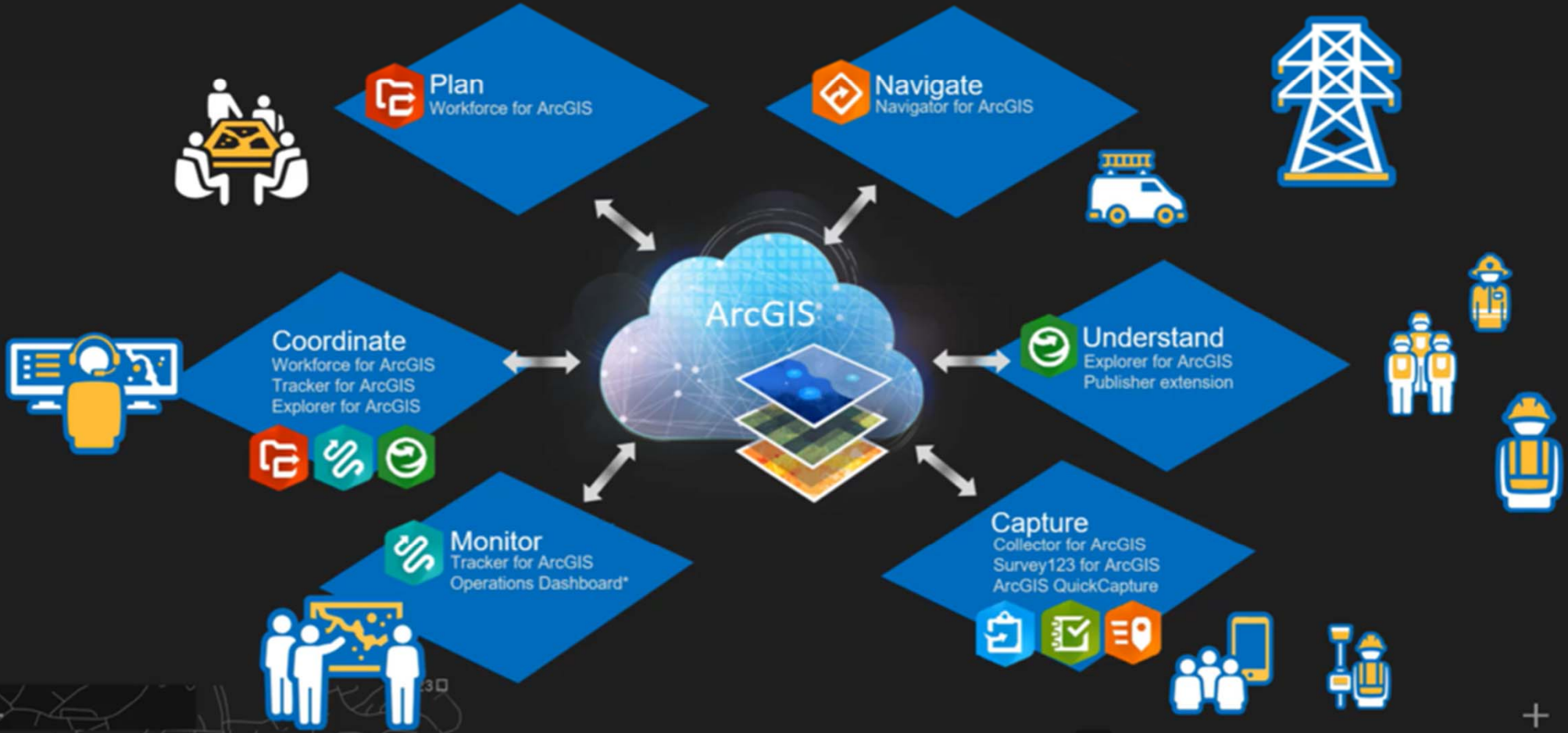


ENTERPRISE DATABASES

Automating Data for
Field Collection

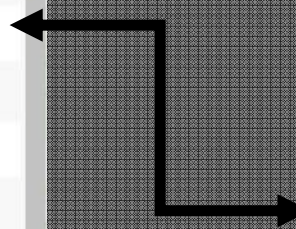




DATABASE TRIGGERS

- A database trigger is procedural code that is automatically executed in response to certain events on a particular table in a database.
- Can be executed on following conditions:
 - **Insert**
 - **Update**
 - **Delete**
- <https://docs.microsoft.com/en-us/sql/t-sql/statements/create-trigger-transact-sql?view=sql-server-ver15>

Outfall ID	D5OF74000-04113
Outfall Name	Demo
County	NASSAU
Latitude	30.59979
Longitude	-81.643904
Outfall Type	Pipe
Drainage Basin	Nassau River
Maintenance Yard	Jacksonville Operations
Date of Last Inspection	5/2/2022
Last Inspection Result	Outfall is functioning as designed



Create New Data

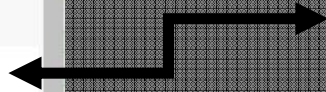
SQL Calculates Unique ID

Update Outfalls SET
StatewideFacilityId = 'D5OF'+ D5Outfalls.countycode + '-' +
Format((NEXT Value for D5OFSequence), '00000') ;

Extract Data From Another Feature

SQL Get County from another Feature Class

```
UPDATE Outfalls  
SET Outfalls.County = CountyBoundaries.Name  
FROM Outfalls  
INNER JOIN CountyBoundaries  
ON Outfalls.shape.STWithin(CountyBoundaries.shape) = 1;
```



Outfall ID	D5OF74000-04113
Outfall Name	Demo
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Maintenance Yard	Jacksonville Operations
Date of Last Inspection	5/2/2022
Last Inspection Result	Outfall is functioning as designed

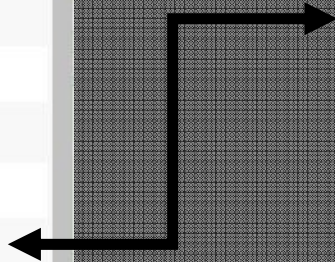
Outfall ID	D5OF74000-04113
Outfall Name	Demo
County	NASSAU
Latitude	30.59979
Longitude	-81.643904
Outfall Type	Pipe
Drainage Basin	Nassau River
Maintenance Yard	Jacksonville Operations
Date of Last Inspection	5/2/2022
Last Inspection Result	Outfall is functioning as designed

Data From Existing Feature

SQL Get Latitude and Longitude of Object

```
UPDATE Outfalls SET Latitude = Shape.STY;
```

```
UPDATE Outfalls SET Longitude = Shape.STX;
```



Outfall ID
D5OF74000-04113

Outfall Name
Demo

County
NASSAU

Latitude
30.59979

Longitude
-81.643904

Outfall Type
Pipe

Drainage Basin
Nassau River

Maintenance Yard
Jacksonville Operations

Date of Last Inspection
5/2/2022

Last Inspection Result
Outfall is functioning as designed

Extract Data From Another Feature

SQL Get Drainage Basin from another Feature Class

```
UPDATE Outfalls  
SET Outfalls.DrainageBasin = Basins.DrainageBasin  
FROM Outfalls  
INNER JOIN Basins  
ON Outfalls.shape.STWithin(Basins.shape) = 1;
```

Outfall ID
D5OF74000-04113

Outfall Name
Demo

County
NASSAU

Latitude
30.59979

Longitude
-81.643904

Outfall Type
Pipe

Drainage Basin
Nassau River

Maintenance Yard
Jacksonville Operations

Date of Last Inspection
5/2/2022

Last Inspection Result
Outfall is functioning as designed

Extract Data From Another Feature

SQL Get Maintenance Yard from another Feature Class

```
UPDATE Outfalls  
SET Outfalls.MaintenanceYard =  
MaintenanceDistricts.MaintenanceYard  
FROM Outfalls  
INNER JOIN MaintenanceDistricts  
ON Outfalls.shape.STWithin(MaintenanceDistricts.shape) = 1;
```


Extract Data From Related Tables

SQL Get Last Inspection Date and Result from Related Inspection Table

```
UPDATE Outfalls SET
DateLastInspection = C.InspectionDate,
LastInspectionResult = C.InspectionResult
FROM Outfalls
INNER JOIN
(SELECT ParentGUID, FORMAT(InspectionDate,'d') AS
InspectionDate, InspectionResult FROM OutfallInspections A
INNER JOIN
(select distinct ParentGUID as GUID, max(InspectionDate) as
InspDate FROM OutfallInspections GROUP by ParentGUID) B
on A.parentguid = B.guid and A.InspectionDate = B.Inspdate) C
ON Outfalls.GLOBALID = C.PARENTGUID;
```

Outfall ID	D5OF74000-04113
Outfall Name	Demo
County	NASSAU
Latitude	30.59979
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Outfall Type	Pipe
Drainage Basin	Nassau River
Maintenance Yard	Jacksonville Operations
Date of Last Inspection	5/2/2022
Last Inspection Result	Outfall is functioning as designed

Create New Data

SQL Calculate Hyperlink to Online Report

```
UPDATE Outfalls SET rptFacility = 'http://somereportsserverurl  
/ReportServer/Pages/ReportViewer.aspx?/FolderName  
/ReportName&rs:Command=Render&GUID=' + cast(globalid as  
varchar(36));
```



QUESTIONS

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