What's New in ArcGIS 10.6

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What's new in ArcMap

ArcMap 10.6 is primarily a quality improvement release, but there are some changes in functionality. The following sections describe these changes.

Geoprocessing

Data Management toolbox

The following changes have been made in tools in the Data Management toolbox:

Tool	Changes
Create Raster Type	You cannot create the ST_Raster type beginning with 10.6. geodatabases.

Spatial Analyst toolbox

Changes

Three tools were updated with new parameters or options, and ten tools now support a new environment.

Distance toolset

- A new tool Cost Path As Polyline is available. This tool is similar to the Cost Path tool, with the difference that it outputs a polyline feature class.

- The following tools now support parallel processing for enhanced performance: Cost Allocation, Cost Distance, Euclidean Allocation, Euclidean Distance

Generalization toolset

- The Nibble tool has two new parameters to give you more control over the nibbling process. With **Nibble NoData cells**, you can now specify whether or not NoData cells in the input raster that are within the mask be allowed to be nibbled to a value, or remain as NoData. The **Input zone raster** parameter allows you to specify zones to control where nibbling occurs.

- The Nibble tool now supports parallel processing for enhanced performance.

Hydrology toolset

- A new tool Flow Distance is now available for calculating the minimum downslope distance for each cell to the stream into which they flow.

- The Flow Accumulation tool now supports a new output data type of Double, to provide more accurate accumulation values.

- The Flow Direction tool now supports two new algorithms for determining the direction of flow. A new parameter, **Flow direction type**, allows you choose between the original algorithm (D8), multiple flow direction (MFD), and D-Infinity (DINF).

- The following tools now support parallel processing for enhanced performance: Basin, Fill, Flow Accumulation, Flow Direction, Sink, Stream Link, and Watershed

Data

Databases and geodatabases

You can now use the PostGIS geography type to store spatial data in PostgreSQL databases and geodatabases in PostgreSQL. To use this spatial data type, the database administrator must enable the database for PostGIS. Specify the appropriate configuration keyword (listed below) when creating a feature class to use the PostGIS geography data type to store spatial data in that feature class:

- For feature classes in a database, choose the `PG_GEOGRAPHY` configuration keyword.

- For feature classes in a geodatabase in PostgreSQL, choose a configuration keyword that has the `GEOMETRY_STORAGE` parameter set to `PG_GEOGRAPHY`. This may be the `DEFAULTS` keyword, the `PG_GEOGRAPHY` keyword, or a custom keyword defined by the geodatabase administrator. Check with your geodatabase administrator to confirm which keyword to use.

See PostgreSQL database requirements for ArcGIS for PostgreSQL and PostGIS versions required to use the geography spatial type with ArcGIS.

A new SQL function is available for ST_Geometry feature classes in PostgreSQL—ST_GeomFromCollection—to allow you to return each individual geometry within a multipart geometry when querying from a SQL client. This function is available when you create a 10.6. geodatabase in PostgreSQL, upgrade your geodatabase in PostgreSQL to 10.6, or update the ST_Geometry type in your PostgreSQL database with the 10.6 ST_Geometry library.

Beginning with 10.6 enterprise geodatabases, the following are no longer supported:

- The ST_Raster type

- Upgrading the multiple database model geodatabase in SQL Server

- Registering an enterprise geodatabase as the managed database for the hosting server of an ArcGIS Enterprise portal

- PostgreSQL 9.3

- DB2 V9.7 and V10.1

Extensions

Network Analyst

Three new tools are added to the Network Dataset toolset

- Make Network Dataset Layer tool allow you to create a network dataset layer from a network dataset that is referenced using its catalog path.

- Create Network Dataset From Template tool creates a new network dataset using the schema from the template file.

- Create Template From Network Dataset tool creates a file containing the schema of an existing network dataset.