# WEEK 1 - 11

## ServiceNow Transform Maps & Field Maps

This guide explains how to import, transform, and map external data into ServiceNow tables using Transform Maps and Field Maps. The document covers basic concepts, advanced features, and common use cases.

## Transform Maps

Transform Maps are used to define the rules for transforming imported data into a format that ServiceNow can understand. This can involve converting data types, cleaning data, and handling special characters.
Transform Maps are defined within the Transform Data Source records in ServiceNow.
Transform Maps use a scripting language called "Transform Script" to define the rules. Transform Scripts can be complex and require a good understanding of the data being imported.

## Transform Script Examples

A simple Transform Script might involve converting a string into a date format:

```
var date = new GlideDate(source.getValue('ImportDate'));
target.setValue('DateField', date);
```

This script takes the value from the "ImportDate" field in the source data and converts it to a ServiceNow Date/Time field.

## Field Maps

Field Maps define how the transformed data fields are mapped to fields in a ServiceNow table. Each mapping specifies a target table and field.
Field Maps are defined within the Transform Data Source records. The Field Map Editor allows you to visually map fields. You can manually map individual fields or import a mapping file.

## Field Map Considerations

The mapping must consider data types and field names.
When mapping fields, make sure that the data types in the imported data match the data types in the target ServiceNow fields. If the data types do not match, you might need to use Transform Maps to convert the data.
Field names should match the names in the target table. If the names are different, you can use Field Maps to rename fields.

# Common Use Cases

Transform Maps and Field Maps are used in a variety of use cases, such as:

**Importing data from spreadsheets**
Excel, CSV, and other spreadsheet formats can be imported into ServiceNow using Transform Maps and Field Maps.
**Importing data from databases**
Data from SQL, Oracle, and other database systems can be imported into ServiceNow.
**Importing data from web services**
Data from REST and SOAP web services can be imported into ServiceNow using the "Web Service Connector" and Transform Maps.

# Advanced Features

Transform Maps and Field Maps offer several advanced features, including:

- Conditional mapping: You can create mappings that only apply if certain conditions are met.
- Data validation: You can validate the data being imported to ensure that it meets your requirements.
- Data enrichment: You can add or modify data before importing it into ServiceNow.
- Scheduled imports: You can schedule imports to happen automatically at regular intervals.

# Best Practices

Here are some best practices for using Transform Maps and Field Maps:

- Clearly define your data requirements before importing data.
- Thoroughly test your mappings before importing large datasets.
- Document your mappings so that others can understand how the data is being transformed and mapped.
- Use error handling in your Transform Scripts to ensure that errors are caught and handled appropriately.