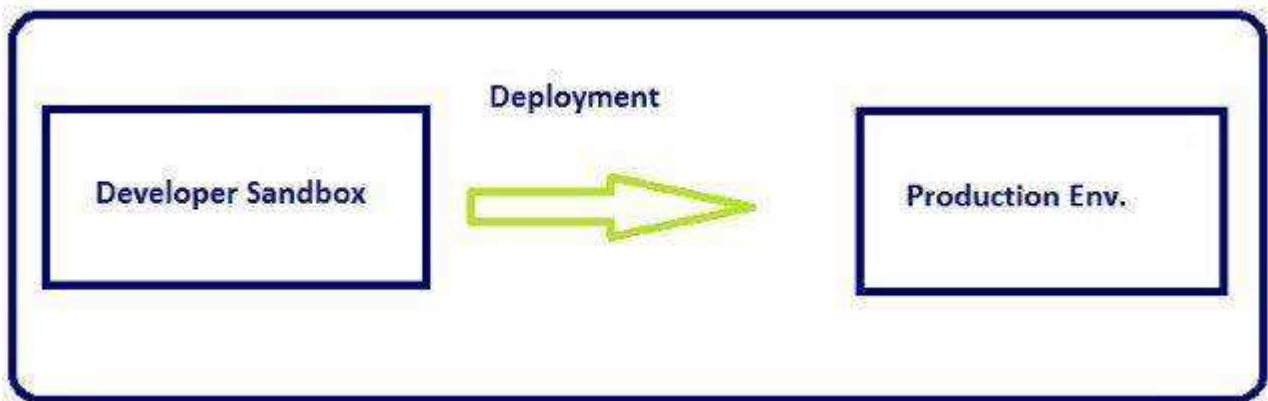


APEX - DEPLOYMENT

What is Deployment in SFDC?

Till now we have developed code in Developer Edition, but in real life scenario, you have to do this development in Sandbox and then you might need to deploy this to another sandbox or production environment and this is called as deployment. In short, this is movement of metadata from one organization to another. The reason is that you can't develop Apex in your Salesforce production organization. Live users accessing the system while you're developing can destabilize your data or corrupt your application.



Tools available for deployment:

- Force.com IDE
- Change Sets
- SOAP API
- Force.com Migration Tool

As we are using Developer Edition for our development and learning purpose, so we cannot use the Change Set or other tools which need the SFDC enterprise or other paid edition. Hence, we will be elaborating the Force.com IDE deployment method in this tutorial.

Force.com Eclipse IDE

Step 1: Open Eclipse and open the class trigger you would like to deploy

```
/* to a production organization to confirm correctness, ensure code
 * coverage, and prevent regressions. All Apex classes are
 * required to have at least 75% code coverage in order to be deployed
 * to a production organization. In addition, all triggers must have some code coverage.
 *
 * The @isTest class annotation indicates this class only contains test
 * methods. Classes defined with the @isTest annotation do not count against
 * the organization size limit for all Apex scripts.
 *
 * See the Apex Language Reference for more information about Testing and Code Coverage.
 */
@isTest
private class CustomerTriggerTestClass {

    static testMethod void myUnitTest() {
        //Create Data for Customer Object

        APEX_Customer__c objCust = new APEX_Customer__c();
        objCust.Name = 'Test Customer';
        objCust.APEX_Customer_Status__c = 'Inactive';
        insert objCust;

        //Now, our trigger will fire on After update event so update the Records
        Test.startTest();//Starts the scope of test
        objCust.APEX_Customer_Status__c = 'Active';
        update objCust;
        Test.stopTest();//Ends the scope of test
    }
}
```

Right Click on class and then
click on 'Force.com' and then
Click on 'Deploy To Server'

```
//Now check if it is giving desired results using system.assert Statement.New invoice should be created
List<APEX_Invoice__c> invList = [SELECT Id, APEX_Customer__c FROM APEX_Invoice__c WHERE APEX_Customer__c = :objC
system.assertEquals(1,invList.size());]//Check if one record is created in Invoice sObject
}
```

Step 2: Once you clicked on 'Deploy to server' then enter the username and password of the organization in which you would like to deploy the Component.

Force.com Component Deployment

Destination Details (Step 1 of 4)

① User name must be specified.

Fields marked with an asterisk (*) are required.

Organization Settings:

*Username: Don't have an organization yet? Sign up for a free Developer Edition organization. [Sign Up Now!](#)

*Password:

Security Token:

*Environment: Production/Developer Edition [Sign Up Now!](#)

Enter your Username and other information here

? < Back Next > Finish Cancel

By performing the above mentioned steps, your Apex components will be deployed to the target organization.

Deployment using Change Set

You could deploy Validation rules, workflow rules, Apex classes and Trigger from one organization to other by connecting them via the deployment settings. In this case, organizations must be connected.

To open the deployment setup follow below steps. Remember that this feature is not available in Developer Edition:

Step 1: Go to Setup and search for 'Deploy'.

Step 2: Click on 'Outbound Change Set' in order to create change set to deploy.

Step 3: Add components to change set using 'Add' button and then save and click on upload.

Step 4: Go to Target organization and click on inbound change set and finally click on deploy.

SOAP API Calls to Deploy

We will just have a small overview of this method as this is not a commonly used method.

You could use the below method calls to deploy your metadata.

- compileAndTest

- compileClasses
- compileTriggers

Force.com Migration Tool

This tool is used for the scripted deployment. You have to download the Force.com Migration tool and then you could perform the file based deployment. You could download the Force.com migration tool and then do the scripted deployment.

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