e-Emphasys

eServiceTech Deployment Guide

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1.   About this Document

The eServiceTech Deployment Guide serves as a handy reference while deploying eServiceTech.

1.1   Document Conventions

This document uses following conventions:

Convention	Description
	This icon indicates additional notes / information about a field, feature or functionality.
	This icon indicates critical information about a field, feature or functionality.
<bold text>	All button names, field labels and critical information is formatted as bold.
Images	All the images in the document are numbered and have a caption below them.
Links and References	Appropriate links and references are provided to related sections.

1.2   Key Terms / Acronyms / Abbreviations

This document has following key terms / abbreviations / acronyms that you should familiarize with:

Key Term	Description
SP	Stored Procedure
SSMS	SQL Server Management Studio
MIME	Multipurpose Internet Mail Extensions

2. Prerequisites for Deploying eServiceTech

This chapter explains the minimum requirements for the hardware and software components which is required for deploying the eServiceTech on the Server as well as the data setup in ERP.

2.1 Hardware Requirements

The table below lists the hardware requirements of the Server.

Component	Minimum Requirement
Processor	• Intel Xeon class CPU processor • 2 vCPUs • 2 GHz per core
Memory	6 GB RAM
HDD	50 GB
Supported Mobile Devices	• iPhone 6S and above • iPad Air 2 • iPad Pro 9.7 inch • iPad Pro 10.5 inch • iPad (2018 edition) • Samsung Galaxy S9/Plus • Samsung Note 8 • Google Pixel 2 XL • Moto G5 Plus and above (or equivalent) • Samsung Galaxy Tab S3 (or equivalent)
Supported Mobile OS Versions	• iOS 9.1 and above (iOS App) • Android 7 Nougat and above (Android App)

2.2 Software Requirements

The table below lists the software requirements of the Server.

Component	Minimum Requirement
Operating System	Windows Server 2016 R2
IIS	10.0
.Net Framework	4.7
SQL Server	Microsoft SQL Server 2016
C4WS	Web UI 10.15 and above

2.3 Setting up Data in EST

This section explains the solutions that must be installed, the time zone data and the setup which must be present in e-Emphasys ERP to deploy and use the eServiceTech.

2.3.1 Checking Process Solutions

This section lists the ERP solutions that must be installed which are required by the application. This section also explains the steps to check whether the desired solutions are installed.

The original solutions or the BASE solution must be installed depending on whether the ERP solution level is at F8 or FP12.

Sr. No	Product Version	Original Solution #	BASE Solution for E50C
1	Older versions	44664, 44664_1, 44664_2, 44664_3, 44664_4, 44664_5, 44664_6, 44664_7, 46188, 46188_1, 48423, 48423_1, 48423_2, 48423_3, 62214, 62214_1, 62214_2, 58847_SER, 64727, 42031, 56951, 62575, 60734, 63224, BASE_INT_EST, INT_COM_56, INT_COM_57, INT_COM_58, INT_COM_59, INT_COM_60, INT_COM_61, INT_COM_62, INT_COM_63, 81064_EXT, 70559_INT, 67842_INT, INT_COM_64,	BASE_E40CE401, BASE_E401_0016, BASE_E40E401_3, BASE_E40E401_2, INT_COM_64, INT_COM_65, INT_COM_70, BASE_E401_0010, INT_COM_68, INT_COM_69

| Sr. No	Product Version	Original Solution #	BASE Solution for E50C
		INT_COM_65, INT_COM_66, INT_COM_67, INT_COM_68, INT_COM_69, 80650, 88521, 89767, 92902_INT, 83133_INT	
2	v2.5	88363_INT, 83658, 99787_INT_1, 99752, 99399, 95974_INT	• Solutions are available under **E50C_1_E501** folder on Support FTP • BASE_E401_0016 • For customer VIM, Solutions have to be picked up from every time from Support FTP from the below path: **VIM\E50C_1_vim1\solutions**
3	v2.7	114049_INT, 111429_INT, 116030_INT	114049_INT, 111429_INT, 116030_INT
4	v2.7.1	116251_INT, 117306_INT, 110990, 121012_INT, 116251_INT_1	116251_INT, 117306_INT, 110990, 121012_INT, 116251_INT_1
5	v2.8	123064_INT, 124691_INT, 121909_INT, 118851_INT, 118851, 121909_INT_1	123064_INT, 124691_INT, 121909_INT, 118851_INT, 118851, 121909_INT_1
6	v2.9	117175_INT, 118804, 115028	117175_INT, 118804, 115028
7	v3.0	118804_1, 117255_INT, 117255_INT_1	118804_1, 117255_INT, 117255_INT_1
8	v3.1 (SMS Pilot)	130762, 130762_INT	130762, 130762_INT

Sr. No	Product Version	Original Solution #	BASE Solution for E50C
9	v3.2	117386, 117386_INT	117386, 117386_INT
10	v3.3	130762_1, 135526_INT, 129063, 129063_INT, 135526_INT	130762_1, 135526_INT, 129063, 129063_INT, 135526_INT
11	V3.3.1	137623	137623
12	V3.4	134958, 134958_INT	134958, 134958_INT
13	V3.5	138694_INT, 138694_INT_1	138694_INT, 138694_INT_1
14	V3.5.1.1	141607_INT	141607_INT
15	V3.6.1.0	143710	143710
16	V3.6.2	145492_INT	145492_INT
17	V3.6.2.2	154213_INT, 154741_INT	154213_INT, 154741_INT
18	V3.7	INT_COM_75, 119424, 119424_INT, 119424_INT_1, 119424_1	INT_COM_75, 119424, 119424_INT, 119424_INT_1, 119424_1
19	V4.0	138871, 138871_INT	138871, 138871_INT
20	V4.3	176420, 99752, 187281_INT	176420, 99752, 187281_INT
21	V4.4	192664_INT	192664_INT
22	V4.5.1	183220_INT 183220_SER 192664_INT 199441_INT	183220_INT 183220_SER 192664_INT 199441_INT

Sr. No	Product Version	Original Solution #	BASE Solution for E50C
23	V.4.6	129798 129798_1 129798_INT 119424_INT_2	129798 129798_1 129798_INT 119424_INT_2
24	V4.7	183220_SER_1 221229	183220_SER_1 221229
25	V4.8	215656 224448	215656 224448
26	V4.9	161190 215657 215658 219369 226666	161190 215657 215658 219369 226666
27	V5.0	229931 221083 246903 246903_1	229931 221083 246903 246903_1

SPECIAL INSTRUCTIONS for solution 111429_INT:
Solution will contain Additional file named 111429_INT.zip, this file contains Data Dump of table tsext002, which has all relevant mapping of Time Zones. This Data Dump must be loaded for successful execution of this BDE. **99440 IS THE SOLUTION FOR TABLE DEFINITION.**

SPECIAL INSTRUCTIONS for solution 134958_INT:
CRDD must be done as new fields "Source Application"(.sapp) and "Source Application Username(.saur) are added in table tssoc855.
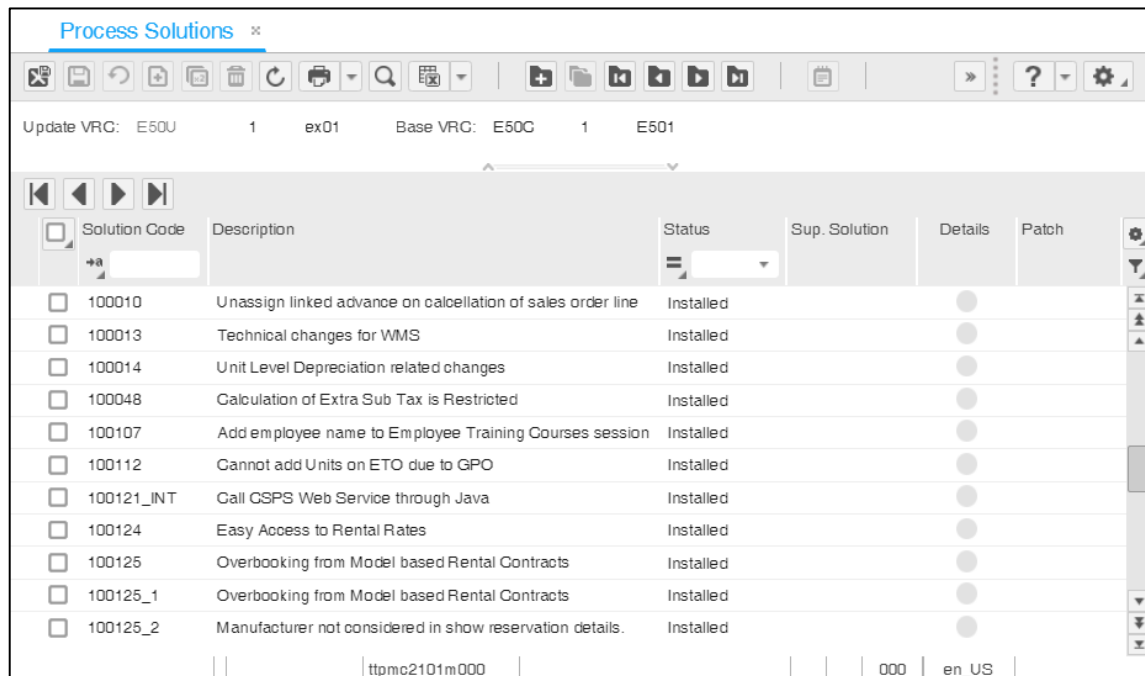
The steps to check whether the desired solutions are installed are explained below.

1. Login to XI and go to the **LN Navigator** section which is available on the right pane on the screen.

2. Under the **Options** tab, enter the session name as **ttpmc2101m000** in the **Run Program** section and click the **Run** button to access the **Process Solutions** (ttpmc2101m000) session.
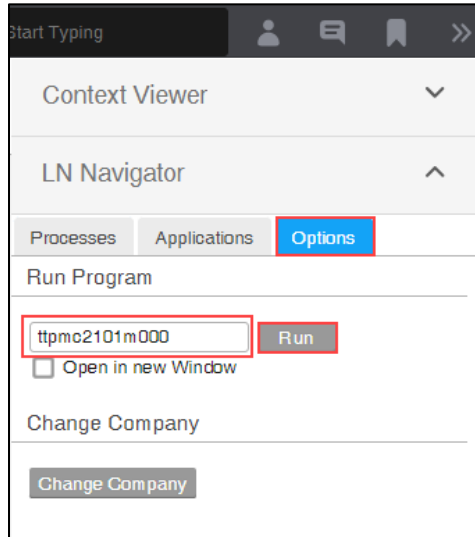
Figure 1: Accessing the Process Solutions (ttpmc2101m000) Session from the Run Program

3. In the **Process Solutions** (ttpmc2101m000) session, which is displayed as illustrated below, you can search the desired solution from the list of solutions mentioned above.

Figure 2: Process Solutions (ttpmc2101m000) Session

2.3.2   Checking Time-zone Data

- The time-zone data should be maintained company wise.
- If eServiceTech Web Version is 2.7.1 or above, this data need not be checked, and you can skip this section.

The steps to check whether the time-zone data is maintained are explained below.

1. Login to XI and go to the **LN Navigator** section which is available on the right pane on the screen.

2. Under the **Options** tab, enter the session name as **tsext0202m000** in the **Run Program** section and click the **Run** button to access the **External-eXtend Timezone mapping** (tsext0202m000) session.

3. In the **External-eXtend Timezone mapping** (tsext0202m000) session, which is displayed as illustrated below, you can check whether the time-zone data is maintained.
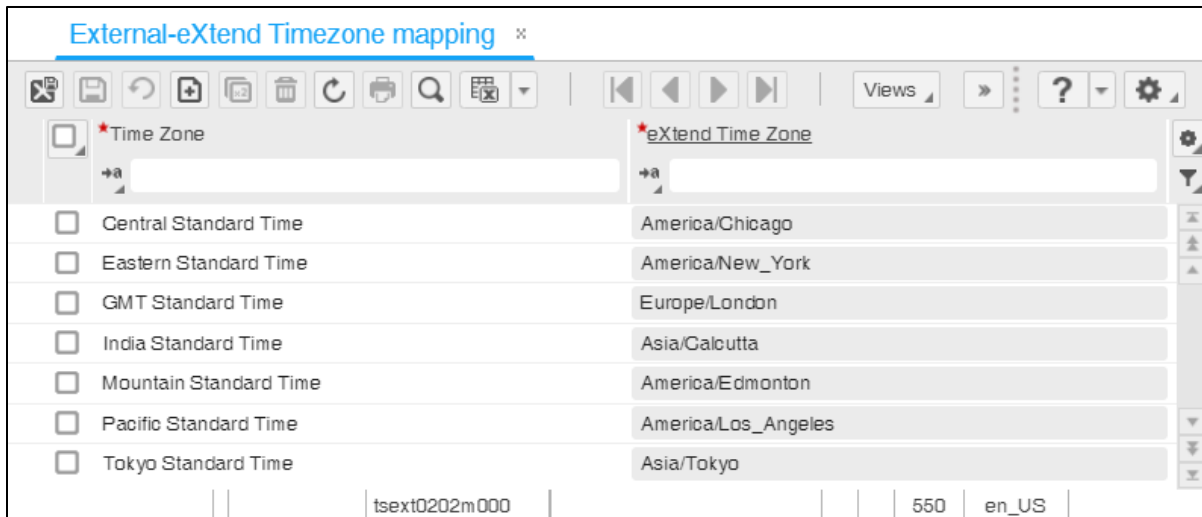
Figure 3: External-eXtend Timezone mapping (tsext0202m000) Session

2.3.3 Verifying Data and Setting Up Parameters in ERP Sessions

This section lists the sessions in e-Emphasys ERP in which data must be present and the steps to setup the Gatekeeper parameters.

The e-Emphasys ERP sessions in which data must be mandatorily present are as follows:

Please don't start the deployment if data is not present in below ERP session

- **Employee** (tccom0501m0000) (With Shift)
- **Service Center Shift Timings** (tsext2160m000)
- **Gatekeeper Service Center Parameters** (tshra0123m000)
- **Gatekeeper Parameters** (tshra0122m000)
- **User Authorization by Warehouse** (whext4100m000)
- **Parts Master** (tcibc0501m000)
- **General Parts Data** (tcibd0101s000)
- **Period Status** (tfgld0107m000)

Additionally, you can verify whether data is present in the below optional e-Emphasys ERP sessions:

- **Service Employee** (tsmdm1540m000)
- **Employee Availability** (tsext2165m000)
- **Equipment Data** (tscfg2100m001)
- **Equipment Parameters** (tdext0100m100)

The data in all the above mentioned sessions should be maintained company wise.

2.3.4.1 Setting Up the Gatekeeper Parameters

The **Gatekeeper Parameters** (tshra0122m000) session helps to maintain the required setup for the General, Service Orders, Hourly Labor Type and Miscellaneous sections.

> This setup must be mandatorily maintained before using the eService Tech application.

Figure 4: Gatekeeper Parameters (tshra0122m000) Session

The below fields are mandatory to be maintained in the **Gatekeeper Parameters** (tshra0122m000) session before using the eService Tech application.

- Labor Recording Option
- Default Main Screen
- Default Password
- General Task
- Service Center for break/lunch time
- Part Issue by Technician
- Allow Edit Lunch
- Allow Edit Clock Time
- Reason Code Mandatory
- Break Order
- Clock in/out(dummy)
- Idle order
- Hourly Labor Type
    - Normal
    - Premium

- o Sunday
- o Overtime
- o Overtime premium
- Time Rounding
- Allowable buffer between clock Times in seconds
- No of days- Work date

2.3.4.2 Setting Up the Gatekeeper Parameters for Service Order Creation from eService Tech

The **Service Orders** section in the **Gatekeeper Parameters** (tshra0122m000) session helps to define whether Service Orders can be created from the eService Tech application and the default data to be populated for such Orders.

Figure 5: Gatekeeper Parameters (tshra0122m000) Session

If the **Allow Service Order Segment Creation from eService Tech** option is selected in the **Gatekeeper Parameters** (tshra0122m000) session, then the **Model**, **Job Code**, **Activity Group** and **Service Type** must be maintained as illustrated in the above screen so that it is considered while creation of new Service Order from the eService Tech application.

2.3.4 Configuring Report Data

This section explains the report data that is to be configured in the **Reports Data by User** (tcext3101m000) session before using the eService Tech application.

The steps for verifying and maintaining report data configuration are explained below.

1. In the **Mapping between eXtend Standard and Variant report** (tcext2150m000) session, check whether a record for the Original Report Code **whinh342011001** is present.
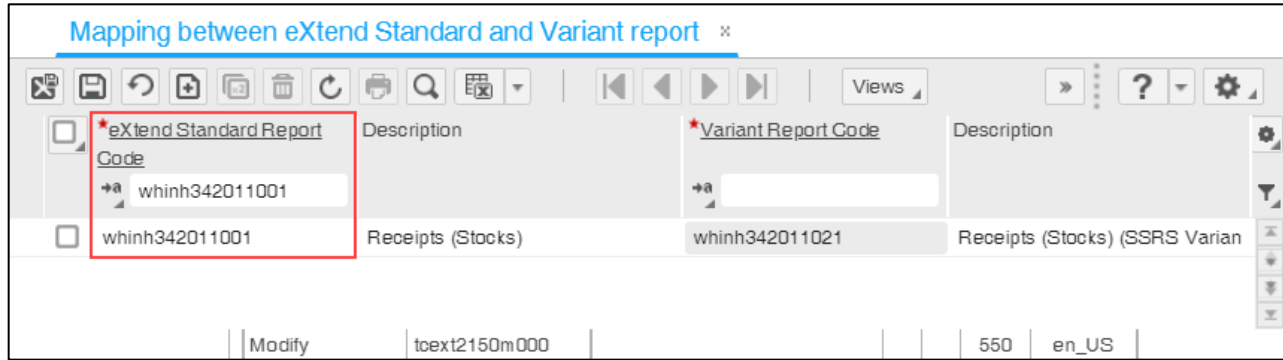
Figure 6: Mapping between eXtend Standard and Variant report (tcext2150m000) Session

2. If the record is present, then the Variant Report Code must be configured in the **Reports Data by User** (tcext3101m000) session.

3. Else, the Original Report Code (whinh342011001) must be configured in the **Reports Data by User** (tcext3101m000) session.
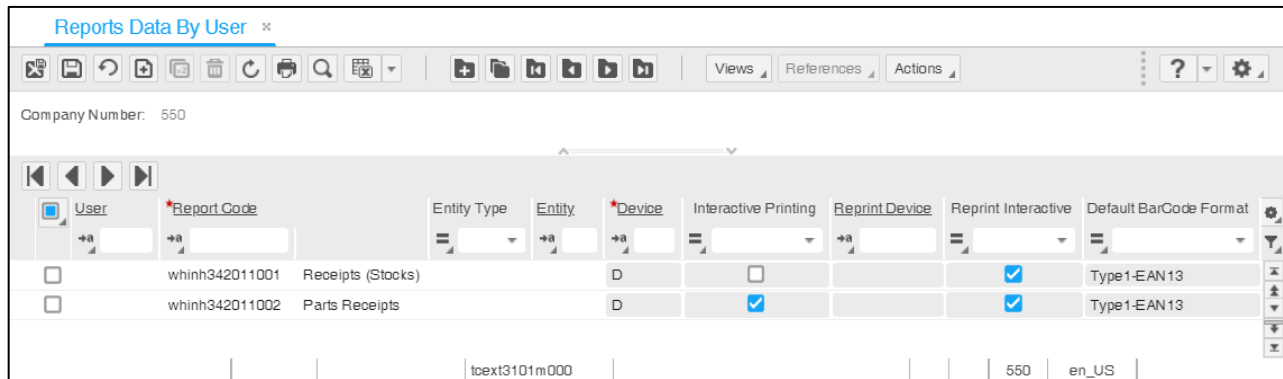
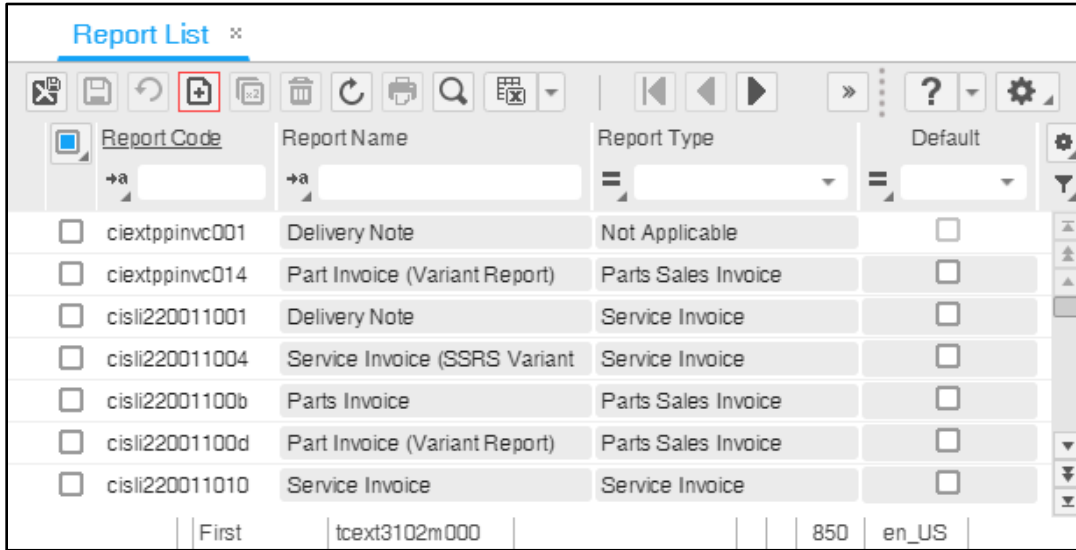**Figure 7: Reports Data by User (tcext3101m000) Session**

4. If the specified Report Code is not maintained in the **Report List** (tcext3102m000) session, a message is displayed as illustrated below.
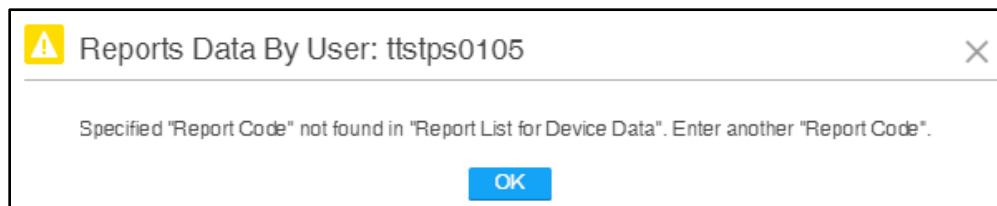
Figure 8: Message Displayed if Report Code is not maintained

In this case, add the report code in the **Report List** (tcext3102m000) session by clicking the **New** icon as illustrated below.

Figure 9: Report List (tcext3102m000) Session

Specify the Report code, the Report type as **Not Applicable** and save the record.
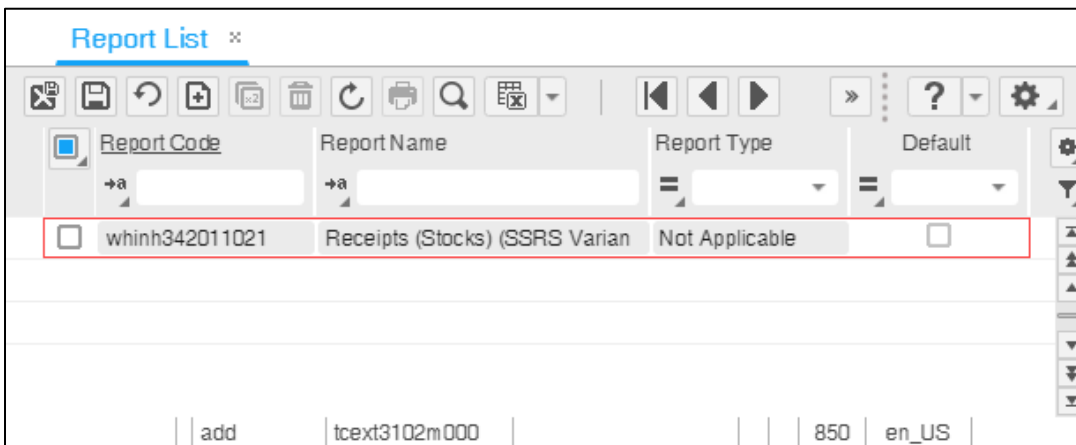
Figure 10: Report List (tcext3102m000) Session

Once this is done, the report can be configured in the **Reports Data by User** (tcext3101m000) session without any error.

2.3.5 Maintaining Device in ERP Device data and Common Parameter

1. Open Device Data(ttaad3500m000)-> New Device-> Add below details.

2. Open Common Parameter Session (tcext0100s000).-> Add Device in SSRS Reporting Tab.

2.3.6 Configuring EST InterfaceID in API Keys Session

1. Open session API Keys(**xicom0117m000**). Maintain interface id as **EST**. If it doesn't exist, then zoom in the field and create a new interface id with the name **EST** and

description as **EST Interface**. Then click on the new icon/button, it will auto-generate API key with created date and login id.
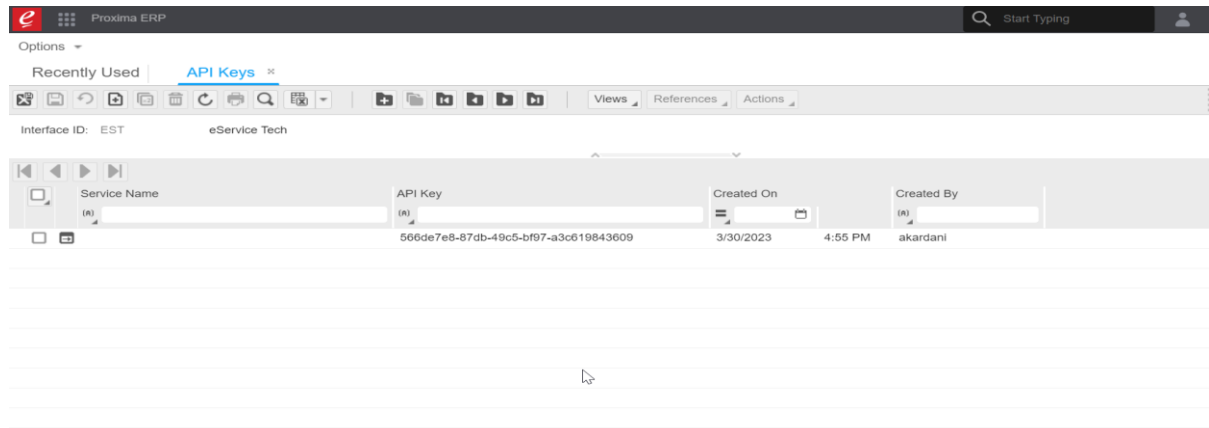
2. Run session **MSP interface implemented** (**xiext3177m000**). On opening the session, turn on the **MSP Implemented** flag.
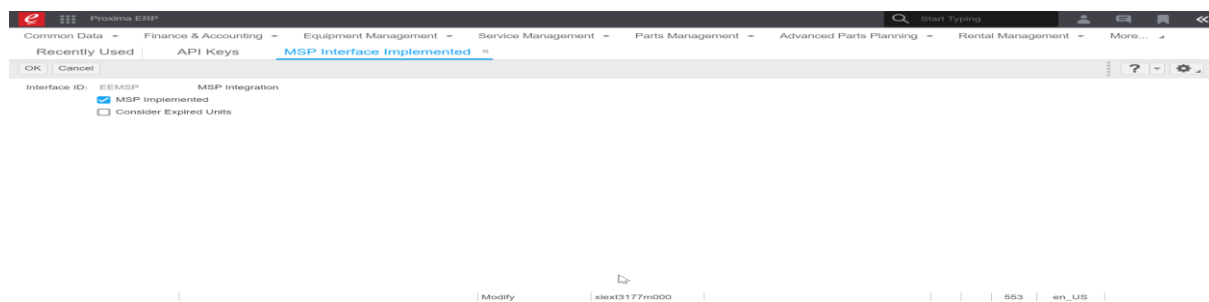
2.3.7   Setup EDC Power User

1. Open Session **whext4151m000** and check **Shipment** parameter. If the **Shipment** Parameter is set to **Pick List Process,** then only perform next step**.**
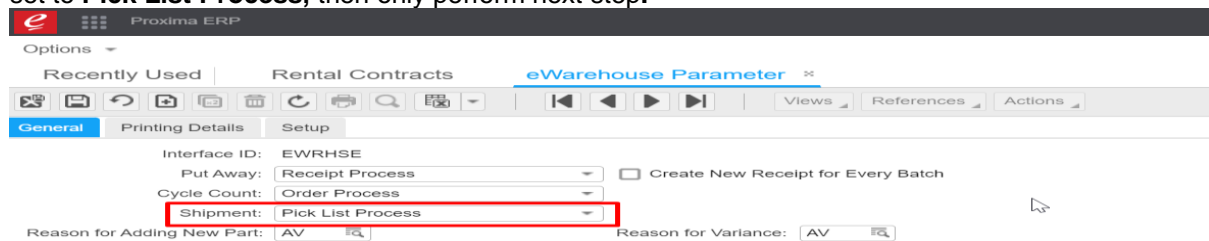
2. This step is performed only if **Shipment** Parameter is set to **Pick List Process** in above step.

Open session **whext2153m000**(EDC Power User) and add entry for eServiceTech user (c4ws user) with interface ID as **EWRHSE** having blank Warehouse. Please refer to the screenshot below for the same.

Recently Used | **EDC Power User** ✕

Interface ID: EWRHSE

Warehouse:

	Power User	User Name
☐	rgandhi	Reena Gandhi
☐	rpawar	Riya Pawar
☐	rtambe	Rohit Tambe
☐	sdudhane	Shital Dudhane
☐	sduvvuri	Sneha Sravanti Duvvuri
☐	sgowda	Sunil Gowda
☐	sshaikh	Siba Shaikh
☐	swapnilj	Swapnil Jadhav
☐	tkale	Tejas Kale
☐	usingh	Utam Singh
☐	vshetty	Vinayak Shetty
☐	xapps_ad	xApps Administrator

Last   whext2153m000

3. Configuration of Database Components for eServiceTech

This chapter explains the configuration of the database components such as the C4WS Web Server and ERP Integrator Service for eServiceTech.

3.1 Host & ERP Integrator URL

Click here for the steps to host ERP integrator on server.

1. Ensure that the authorization is provided for **EST, EEMSP, XAPPS** in the **ERP Integrator Authorization** (**xiint0510m000**) session in e-Emphasys ERP. If not, provide the necessary authorization.

3.2 Configure C4WS Web Server

The steps for configuring the C4WS Web Server are explained below.

1. Go to the C4WS URL and click the **ERP Servers page** link.

2. On the screen which appears, click the **Add ERP Server** button.

3. Select the **Create ERP Server without using any of the available LN UI Environments** option and click **Continue**.

4. The **Add an ERP Server** window opens as illustrated below.

Figure 11: Add an ERP Server Window

5. Maintain the **ERP Server Name** as **eST_Live** / **eST_UAT** and **eST_Live2 / eST_UAT2**, the **Host Name** as the ERP Application IP and the **Password** as **Password**.

6. The **BSE** and **Bshell** will be provided by the IS team.

7. For C4WS ERP, we have two configurations:

- For all BDEs except Approve Labor BDE
- Approve Labor Only

Configuring eST_Live / eST_UAT ERP Server

This section explains the configuration for **eST_Live** / **eST_UAT** ERP Server.

For the **eST_Live** / **eST_UAT** ERP Server, specify the following:

Field	Value
Max connections	1
Max references	0
Max threads	2500
Time Out (Keep alive time in seconds)	600

Identifier

ERP Server: * eST_Live

Server

Host name: * 172.24.17.54
Activation type: rexec
Port: 512

Activation

User: * baan
Password: * ••••••••
BSE: * D:\extendln\bse
Bshell: * bshell
Environment:
Company: 101
Max connections: * 1
Max references: * 0
Max threads: * 2500
Keep alive time (seconds):   * 600
Options: ☑ Trace
    ☑ Allow anonymous requests

Figure 12: eST_Live / eST_UAT ERP Server Configuration

The list of BDEs to configured under this setting are as follows:

- AddEditDelete
- ESTGetTasksSignOffList
- ESTOpenServiceOrders
- ESTOrderLines
- ESTPickNConfirm
- ESTPricing
- ESTServiceOrder
- ESTUpdateMeterData
- GetSetServiceText
- TextDetails
- EPSAddresses
- QuickAddEquipment
- ManageCustomer

3.2.1 Configuring eST_Live2 /eST_UAT2 ERP Server Only for Approve Labor

This section explains the configuration for **eST_Live2 / eST_UAT2** ERP Server.

For the **eST_Live2 / eST_UAT2** ERP Server, specify the following:

Field	Value
Max connections	1
Max references	0
Max threads	-1
Time Out (Keep alive time in seconds)	600

Modify an ERP Server

Identifier

ERP Server: * eST_Live2

Server

Host name: * 172.24.17.54

Activation type: rexec

Port: 512

Activation

User: * baan

Password: * •••••••••

BSE: * D:\extendln\bse

Bshell: * bshell

Environment:

Company: 101

Max connections: * 1

Max references: * 0

Max threads: * -1

Keep alive time (seconds):   * 600

Options: ☑ Trace

    ☑ Allow anonymous requests

Figure 13: eST_Live2 / eST_UAT2 ERP Server Configuration

The **ESTLaborEntryApproval** BDE must be configured under this setting.

3.2.2 Configuring ERP Integrator Service for eService Tech

The steps for the configuration for ERP Integrator Service for eService Tech are explained below.

1. Create a third ERP server for eService Tech as **eST_UAT3** and **eST_Live3** with the below settings.

Field	Value
Max connections	1
Max references	0
Max threads	-1
Time Out (Keep alive time in seconds)	600

2. Deploy the **ERPIntegrator** Service with newly created ERP server.
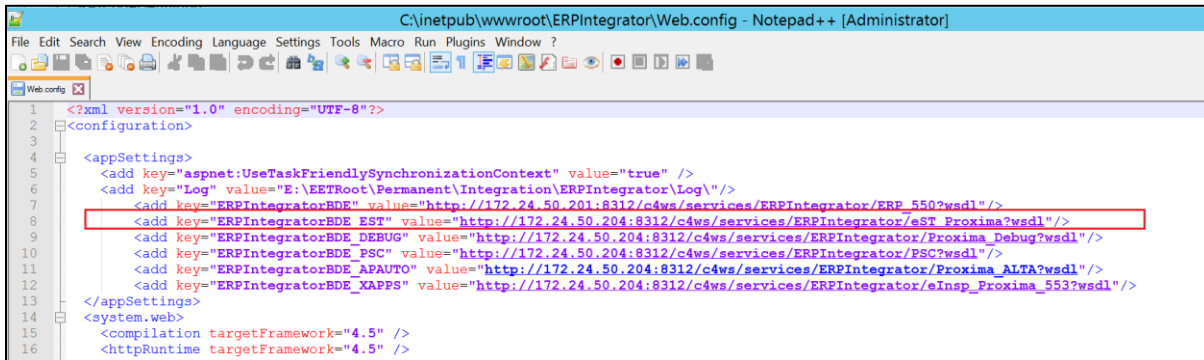
Figure 14: Deploying ERPIntegrator Service

3. Copy the URL of ERP integrator Service.

Figure 15: Copying URL of Integrator Service

4. Add the below key in the **Web.config** file of the **ERPIntegrator** service and paste the URL as its value.

Figure 16: Web.config File

4.   Accessing the Remote Server

There are two types of customer environments.

- EET Domain, for example, Bohl (bohl-eapps.eetcld.com)
- Own customer, for example, Alta (e-apps.altaequipment.com)

5.   Downloading Deployment Package

This chapter explains the steps to download the deployment package.

We need to download two deployment packages for eServiceTech.

1.Common

2.Client Specific(Client Web.config, Database Script)

> Always download the new deployment package using the link provided. You must never use the existing package as the deployment package is constantly updated.

1. Open the available browser on the server and go to below link for common package:

    https://xapps1.e-emphasys.com:10000/Deployment/New/eServiceTech

2. The Deployment page is displayed with the deployment packages for eService Tech as illustrated below.
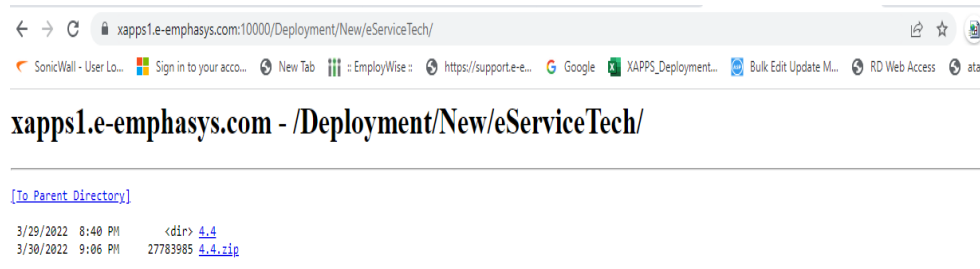
Figure 17: eService Tech Deployment Common Packages

3. Click the required package to download it. For example, if version 4.4 is required, then click the **4.4.zip** in the list.

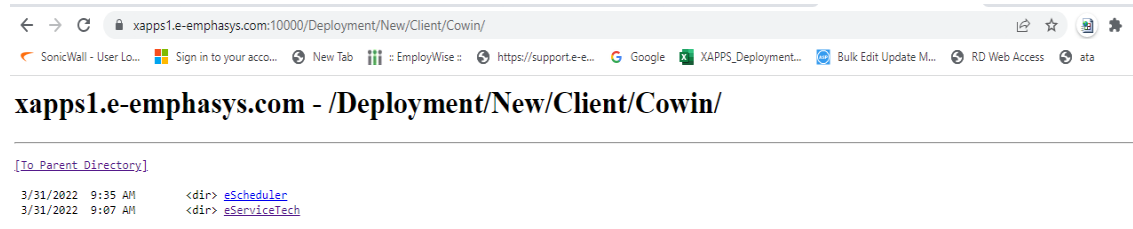4. Open the available browser on the server and go to below link for client specific package:

    https://xapps1.e-emphasys.com:10000/Deployment/New/Client/
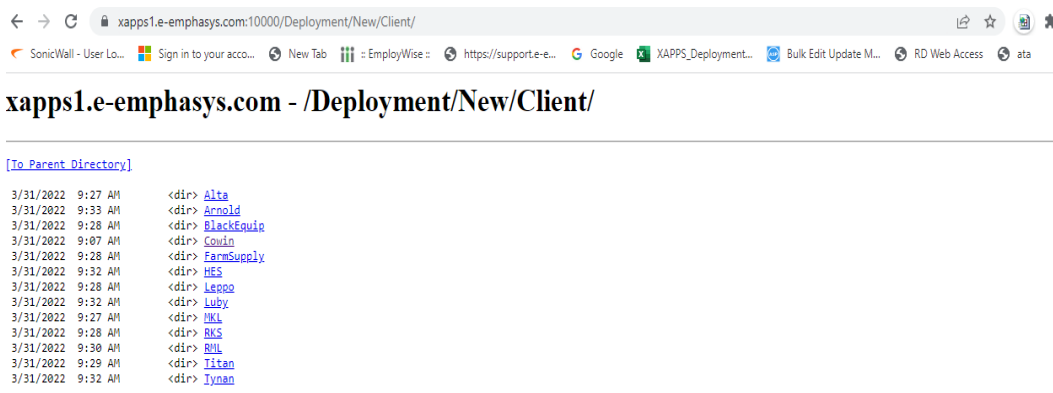
Figure 18: eService Tech Deployment Client Specific Packages

Click on required client name for example as shown below- Cowin click on required product
Here we will click on eServicetech as shown in below image.

Figure 19: eService Tech Deployment Client Specific eServiceTech Package

Download Live or UAT as per requirement package by clicking respective .zip file as shown below-
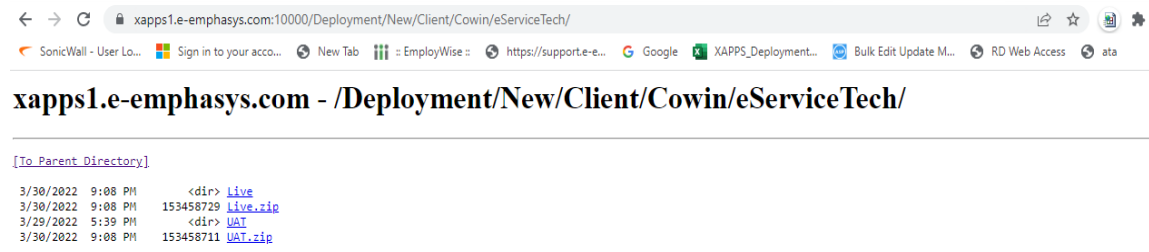
Figure 20: eService Tech Deployment Client Specific eServiceTech UAT Package

5. The zip files will be downloaded in the **Downloads** folder in C drive.

6. Copy the zip file from this folder and paste it in the scrap folder in the respective drive on the server. Click here for the client wise path details to paste the deployment package.

7. Extract the zip file to get the deployment package files.

6. Performing Backups (For Upgrade Only)

There are two types of deployments, viz., Upgrade and Fresh. Backup is not required for Fresh deployments. Backup must be taken for Upgrade. This chapter explains the process of performing the backup for the database as well as eServiceTech application.

6.1 Backing Up the Database

This section explains the steps to backup the database.

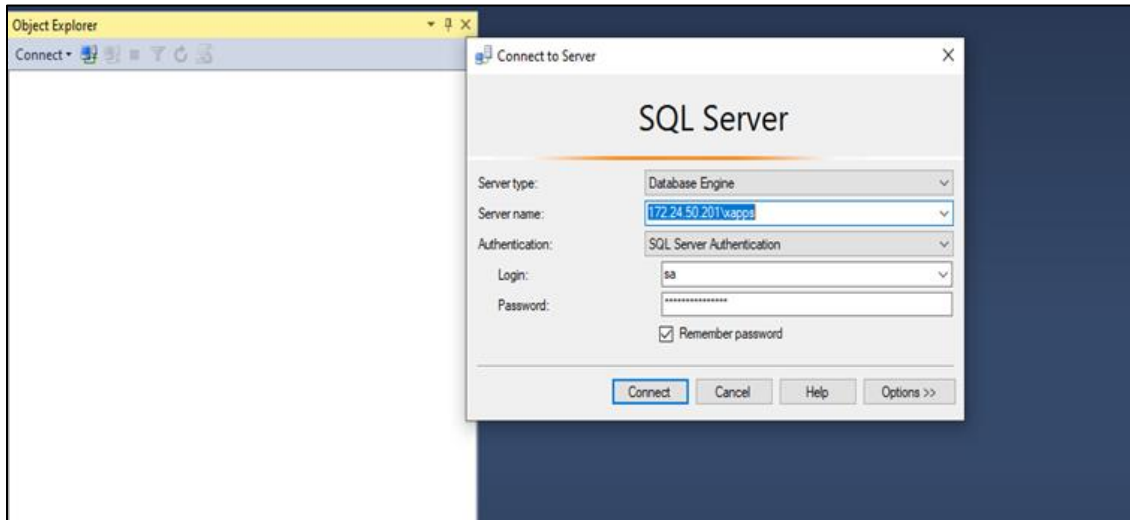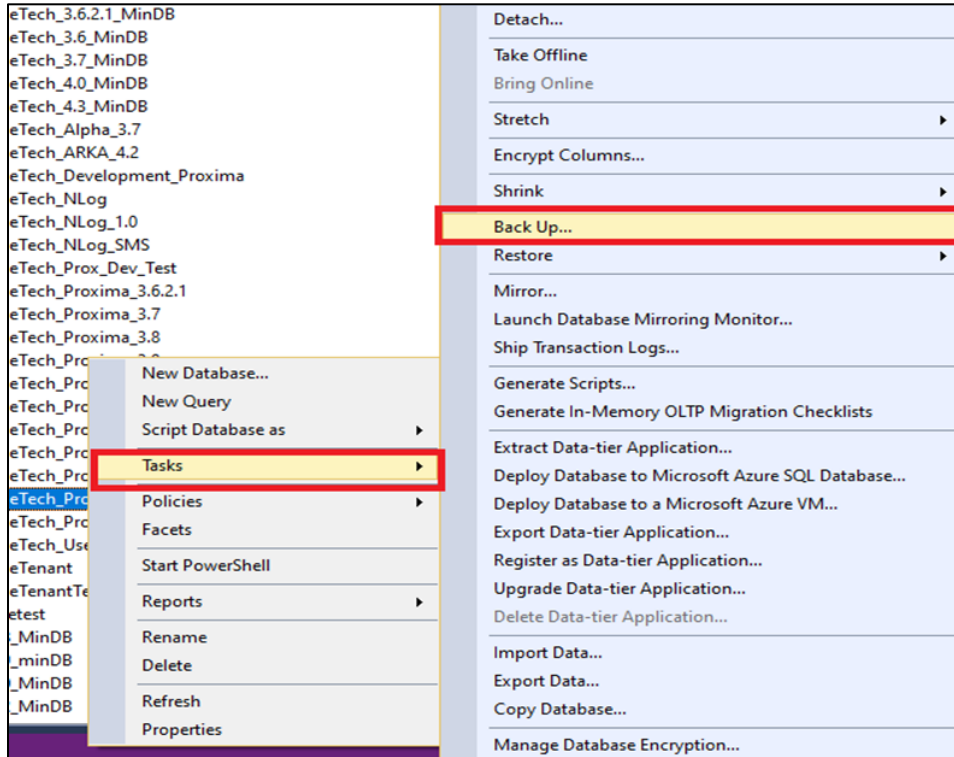1. Open **SQL Server Management Studio** and connect with the below server details.

Figure 21: SQL Server Details

2. Select the database as **eServiceTech_Live** or **eServiceTech_UAT** based on the environment (Live / UAT).

3. Select the database and right click the database name to access the context menu. Select the **Back Up** sub option from the **Tasks** option in the context menu.

Figure 22: Accessing the Back Up Option from the Context Meu

4. Click the **Add** button as illustrated below.
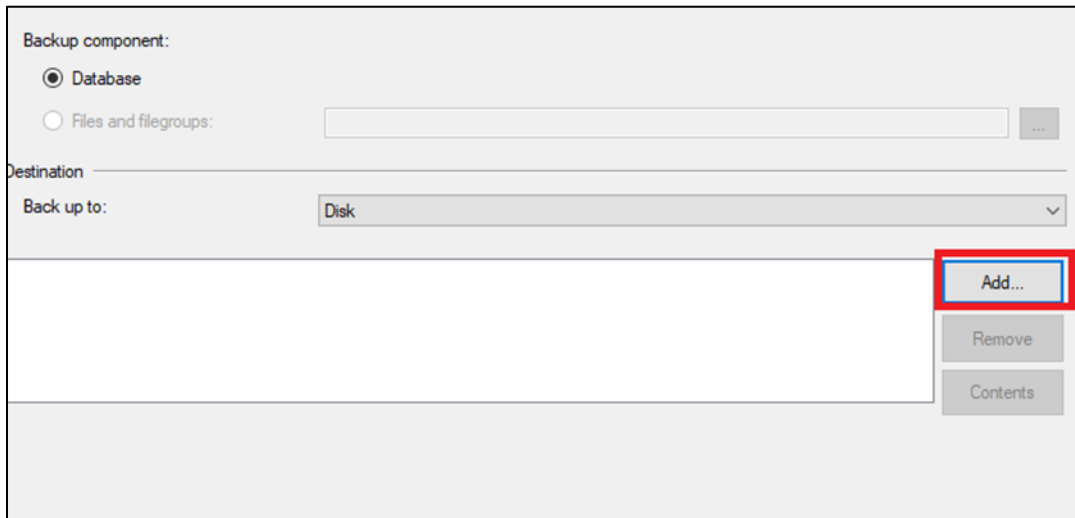
Figure 23: Adding Back Up

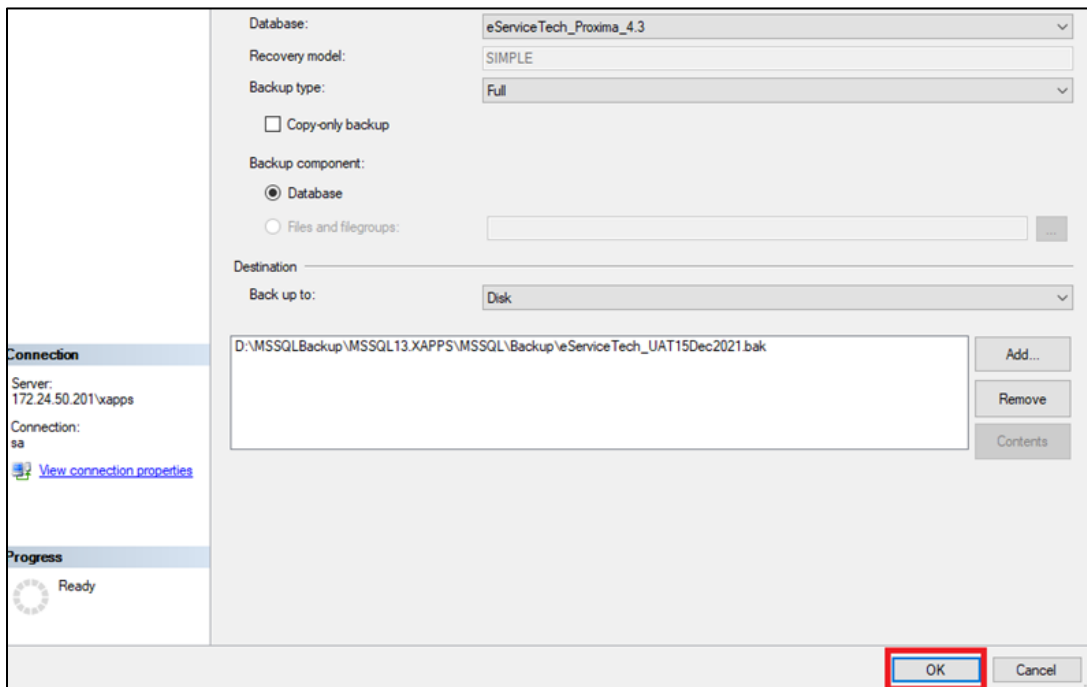5. Specify the file name path. The naming convention for the Back Up file is as follows:

    Database name_ Date_bak

    For example, the backup file name for the **eServiceTech_UAT** database on 15th December 2021 is **eServiceTech_UAT_15Dec2021.bak**.
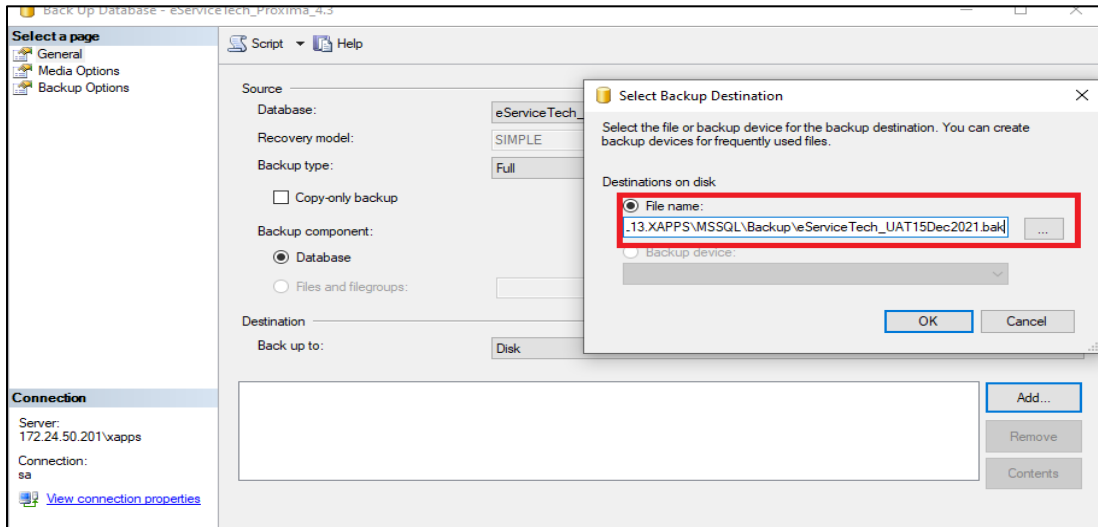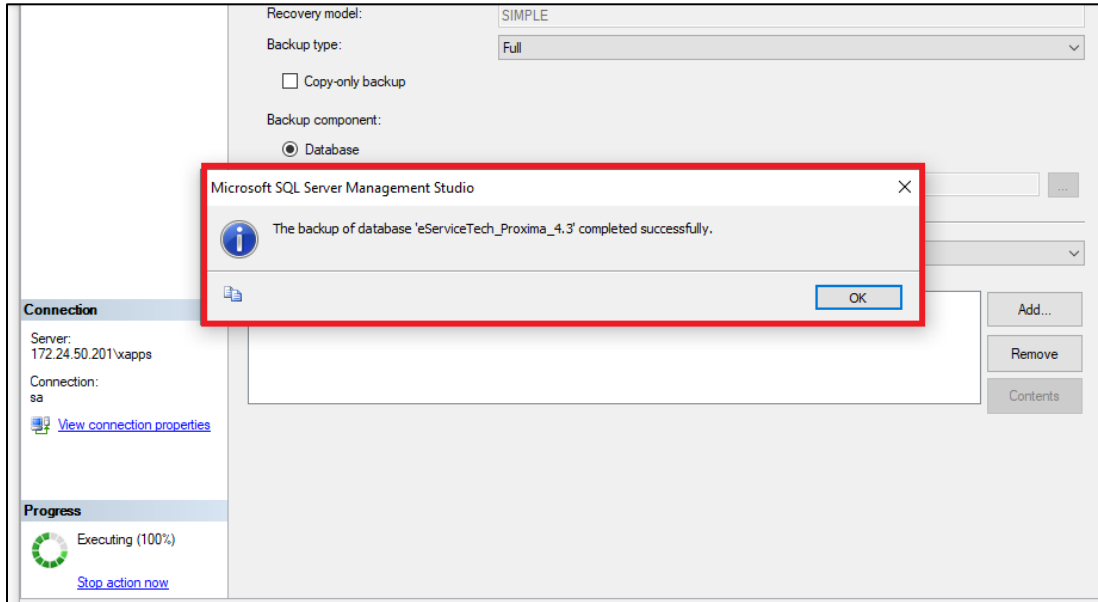
Figure 24: Back Up File Name

6. Click the **OK** button in the **Select Backup Destination** popup.

7. Click the **OK** button on the main screen.

Figure 25: Main Screen

8. If the backup is completed successfully, a message for the same is displayed as illustrated below.

Figure 26: Successful Backup Notification

6.2 Backing Up the Application

This section explains the steps to backup the application.

1. Copy the folders highlighted in the below screen from **eServiceTech** folder.
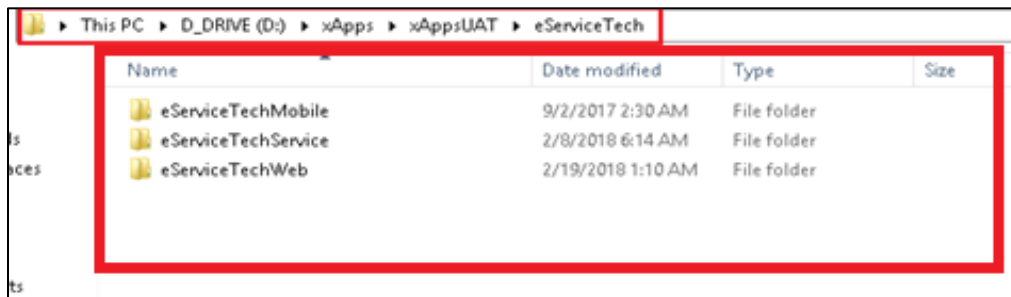
Figure 27: eServiceTech Folder

2. Create a new folder inside the **Backup** folder on the server with name as eServiceTech followed by the date. For example, **eServiceTech15Dec2021**.

3. Paste the copied folders in the newly created folder.

7. Deployment of Database Components for eServiceTech

This chapter explains the deployment for the fresh as well as existing databases.

Ensure that the **xAppstransact** user has the below rights for all the required databases (extenddb, eServiceTechLive / UAT, eServiceTechNLogLive/UAT, eSchedulerLive / UAT, eSchedulerNLogLive / UAT, eServiceTenant, eServiceJobLive / UAT, IntegrationDocumentManagementLive / UAT):

- db_ddladmin
- db_datawriter
- db_datareader
- db_executor (Custom Role): Use the below commands to create this role and grant rights to eScheduler_UAT or eScheduler_Live database.
  - CREATE ROLE db_executor;
  - GRANT EXECUTE TO db_executor;
- Dbcreator
- db_backupoperator

7.1 Fresh Deployment for Local Database

For local databases eServiceTech_UAT and eServiceTech_LIVE, the steps to create database are explained below.

1. Open SSMS and create new database eServiceTech_UAT/eServiceTech_LIVE

2. Make sure the collation on new database should be SQL_Latin1_General_CP1_CI_AS.

3. Open **common** deployment package folder then open **Database** folder and inside Database folder click on **New** folder and open it. Now open **Local_eServiceTech** folder.
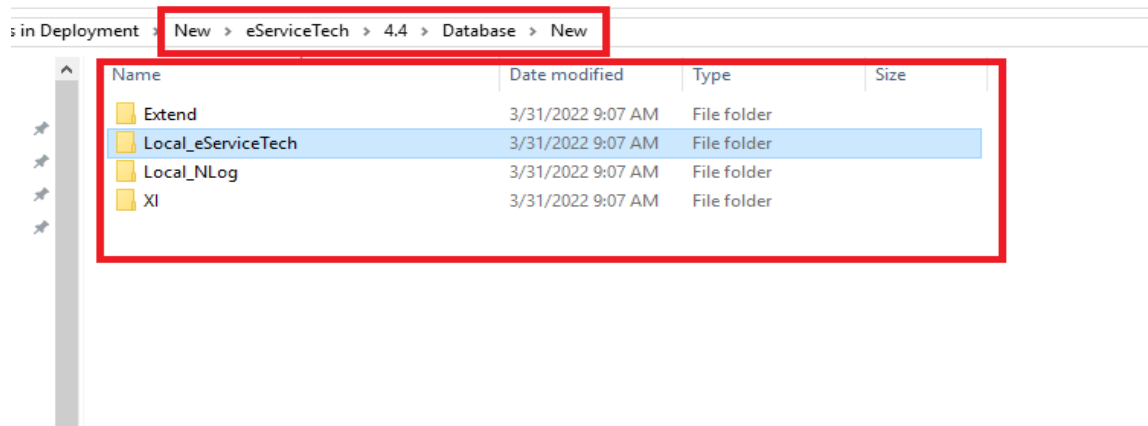
Figure 28: eServiceTech Local Db Folder for Fresh Deployment

4. Now, execute all scripts sequentially present inside **Local_eServiceTech** folder.

Figure 29: eServiceTech Local Db Scripts for Fresh Deployment

7.2   Upgrading Deployment for Local Database

The steps to upgrade the existing deployment for the local database are explained below.

1. Go to the folder which you have downloaded (as explained in the Downloading Deployment Package chapter)which consists of the Common deployment packages → Database →Upgrade→ **AlterScript** file.

Figure 30: AlterScript File in the Deployment Packages Folder

2. In the **AlterScript** file, select the correct version from which the database is to be upgraded. For example, if the Customer has eServiceTech v3.6, all the scripts which are above the 3.6 version, till the latest version which is to be deployed must be selected.

Figure 31: AlterScript File

3. Select the desired script and run it.

4. Select the proper database (eServiceTech) from the list for each file when executing the script.

5. Select the **Execute** option from the **Query** menu as illustrated below to execute the script. Navigate to the **Execute** option as illustrated below. The script is fetched in the right window.
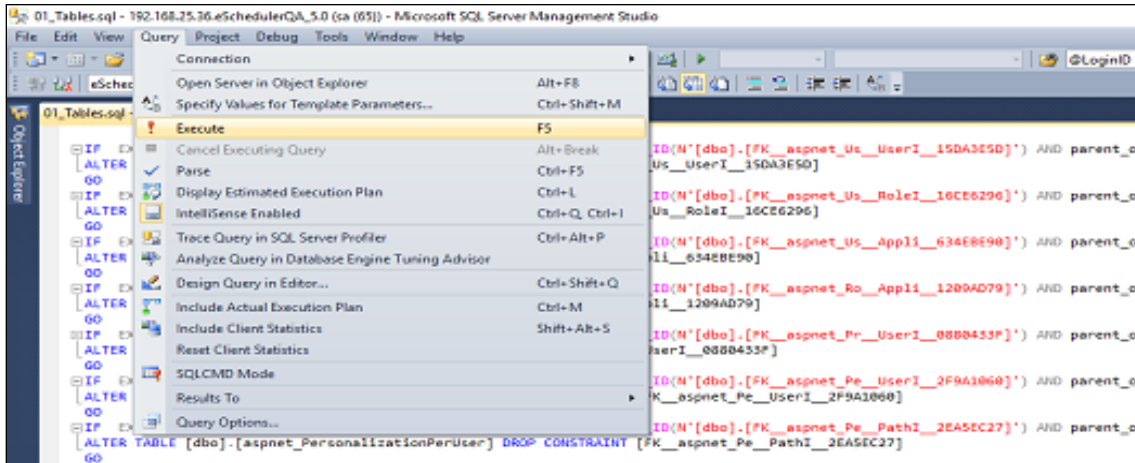
Figure 32: Accessing the Execute Option from the Query Menu

6. After **AlterScript**, run the Local eServiceTech Stored Procedure with the related version number, for example, 4.4.

| 📄 03_Local_eServiceTech_4.4 | 2/15/2022 6:16 PM | Microsoft SQL Ser... | 767 KB |
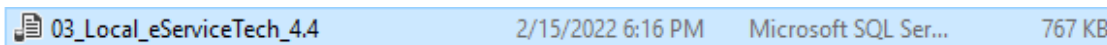
Figure 33: Local eServiceTech Stored Procedure with the Related Version Number

7. Open the file and execute as it is.

8. Execute the local database functions. If function already exists, use **ALTER**, else use **CREATE**.

| 📄 02_Local_Functions | 2/15/2022 6:09 PM | Microsoft SQL Ser... | 2 KB |

Figure 34: Executing Local Database Functions


```
Create Or ALTER Function [dbo].[getCommaSeparatedIntoTable]( @array nvarchar(MAX)
returns @IntTable table
    (IntValue nvarchar(200))
AS
begin

    declare @separator char(1)

    set @separator = ','

    declare @separator_position int
    declare @array_value nvarchar(4000)
```
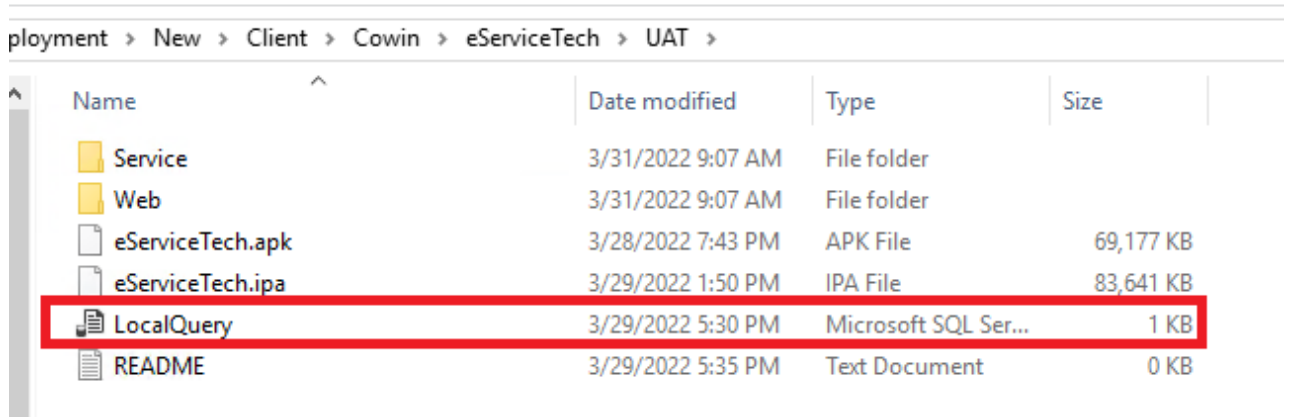
Figure 35: Create or Alter Function

9. Some add-on features for which access will be provided as per customer requirements are as follows:

- eVA
- Forms
- Video Call
- Add Service Order Segment
- Add New Equipment
- Retry Failed Orders
- AR Assist

10. Separate scripts are maintained for each add-on feature access. Special instructions on how to execute these in sequence will be provided over email.

7.3   Local Database Client Specific-

Open client wise downloaded eServiceTech UAT/Live deployment package for example Cowin UAT.

Open LocalQuery.sql file and execute it in local eServiceTech database.

Figure 36: Local Client Specific Query

7.4 Deploying eXtend Database Objects (Common for Fresh & Upgrade)

This section explains the steps to deploy eServiceTech database objects on eXtend database server.

1. Connect to the eXtend database server using valid credentials.

2. From the **Start** menu, navigate to **Programs** → **Microsoft SQL** Server → **SQL Server Management Studio**.

3. Replace **<<Server>>** with the valid eXtend database server and enter the **Login** and **Password** and click **Connect**.

   For example, 192.168.25.195\extendpri

   Where,

   - 192.168.25.198: IP Address of eXtend DB Server
   - extendpri: Instance where DB has to be configured.
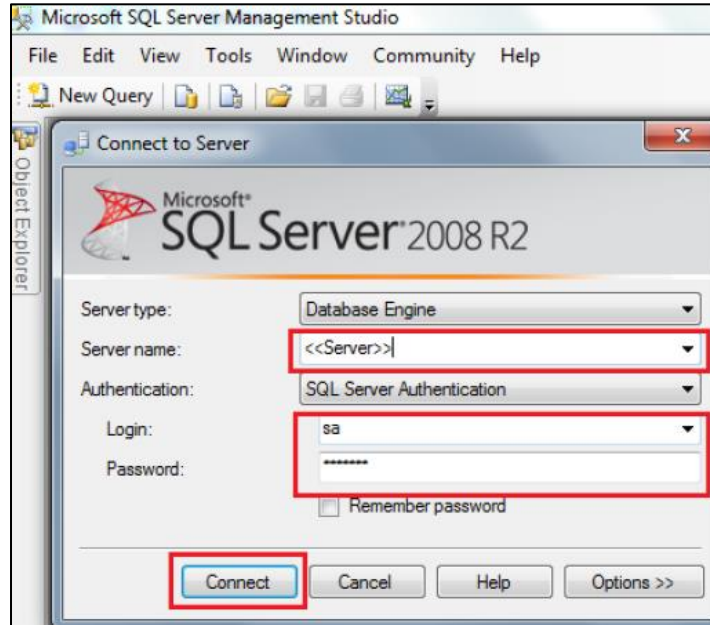
Figure 37: Microsoft SQL Server Management Studio Window

4. Select the proper database from the list when the executing script.

5. Select the Stored Procedure file from Extend folder with extension and navigate to the **Execute** option from the **Query** menu to execute the script.

Name	Date modified	Type	Size
Extend	3/31/2022 9:07 AM	File folder	
Local_eServiceTech	3/31/2022 9:07 AM	File folder	
Local_NLog	3/31/2022 9:07 AM	File folder	
XI	3/31/2022 9:07 AM	File folder	

02_ERP_eServiceTech_4.4	2/12/2022 12:53 PM	Microsoft SQL Ser...	633 KB

Figure 38: Stored Procedure File

6. For fresh deployment execute below function file-

01_ERP_FUN_fnSplitString	10/21/2021 3:59 PM	Microsoft SQL Ser...	2 KB

7.4   Deploying XI Database Objects

This section explains the steps to deploy eServiceTech database objects on XI database server.

1. Connect to the XI database with given server details.

2. Execute the below file present in XI folder.

Figure 39: Executing File for XI Database

7.5   Deploying NLog (Local) Database Objects

This section explains the steps to deploy eServiceTech database objects on NLog (Local) database server.

1. Connect to the xApps database server using valid credentials.

2. From the Start menu, navigate to **Programs** → **Microsoft SQL Server** → **SQL Server Management Studio**.

3. Replace **<<Server>>** with the valid eServiceTech database server and enter the **Login** and **Password** and click **Connect**.

    For example, 192.168.25.195\xapps

    Where,

    - 192.168.25.198: IP Address of DB Server Instance
    - xapps: Instance where DB is to be configured.
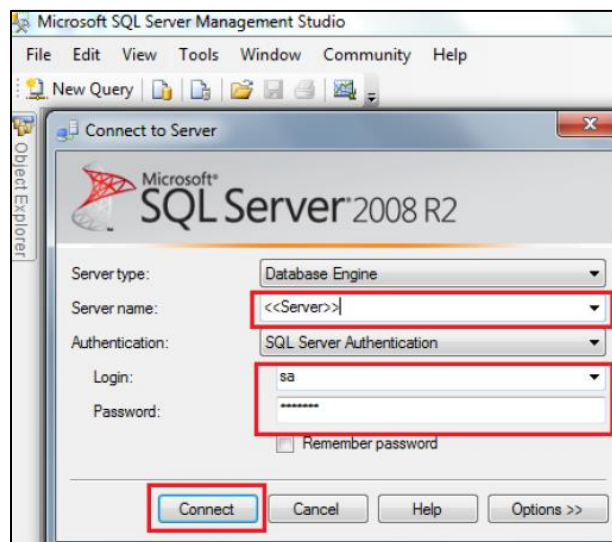
Figure 40: Microsoft SQL Server Management Studio

4. For fresh deployment, right click on **Databases** and select the **New Database** option as illustrated below.
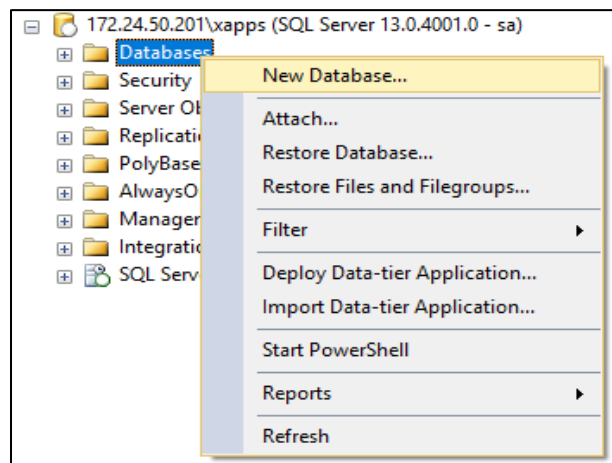
Figure 41: Accessing the New Database Menu Option

5. In the **New Database** popup that opens, enter the name as **eServiceTech_NLog** in the **Database name** field.
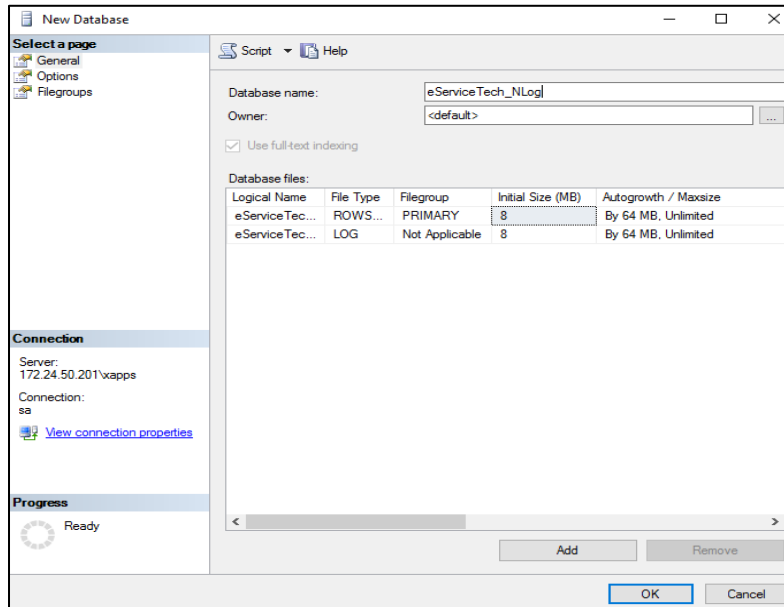
Figure 42: New Database Window

6. Navigate to the **Options** tab from the **Select a page** pane on the left side of the screen. Select the **Collation** as **SQL_Latin1_General_CP1_CI_AS** and set the **Recovery Model** as **Simple**.
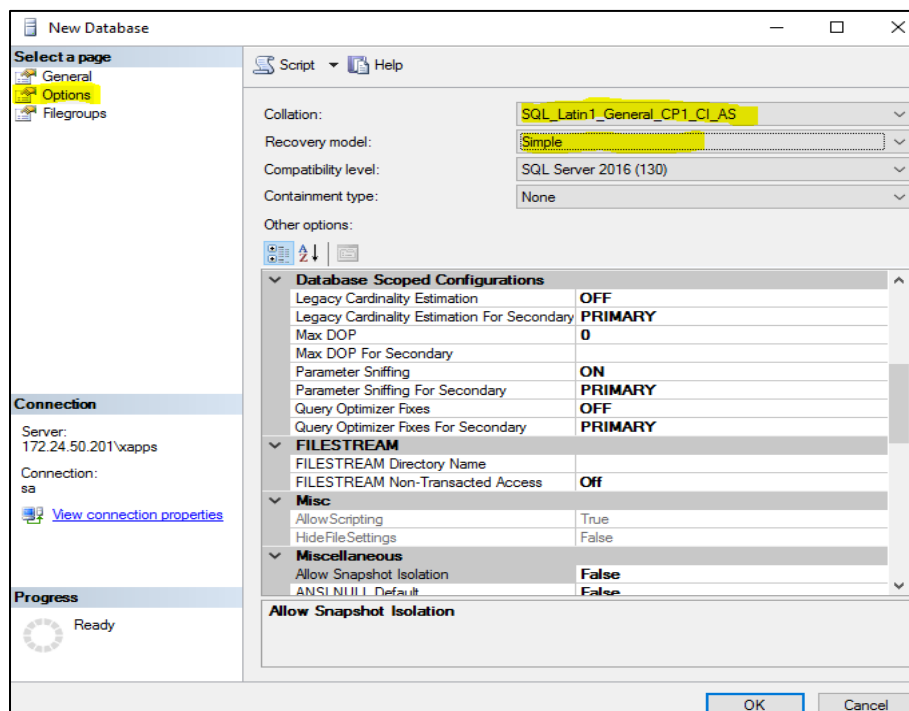
Figure 43: Options Tab

7. Click **OK to** create nLog Database.

8. Right click on **Databases** and select the **Refresh** option from the context menu to view the newly created database.

9. Execute script file present in **Local_NLog** folder.

📁 Extend	3/31/2022 9:07 AM	File folder	
📁 Local_eServiceTech	3/31/2022 9:07 AM	File folder	
📁 Local_NLog	3/31/2022 9:07 AM	File folder	
📁 XI	3/31/2022 9:07 AM	File folder	
📄 NLogDb	10/21/2021 3:59 PM	Microsoft SQL Ser...	8 KB

8. Configuration of Components for eServiceTech Web App

This chapter explains the configuration for Application Pool for eServiceTech for installing eServiceTech on Web Server, creating Web Sites, configuring MIME Types as well as configuring the Web.config file for eServiceTechService or Service and eServiceTech Web App.

8.1 Installing eServiceTech on Web Server

The steps to configure Application Pool for eServiceTech for installing eServiceTech on Web Server are explained below.

1. Open the Internet Information Services (IIS) Manager.

2. Go to the **Start** menu and type **inetmgr** command in the search box and press **Enter**.
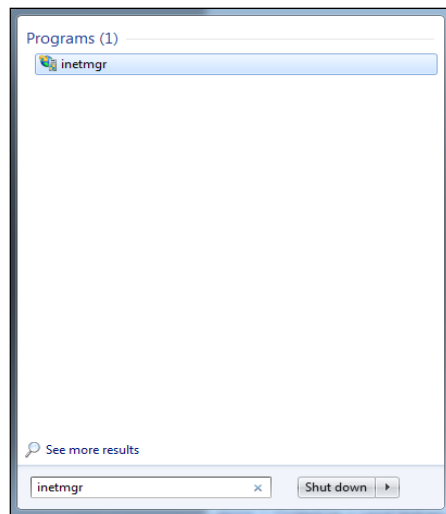
Figure 44: Accessing the inetmgr Program from the Start Menu

3. Alternatively, you can right-click the **Start** menu and then click **Run**. In the **Run** window which opens, type **inetmgr** command and click **OK**.
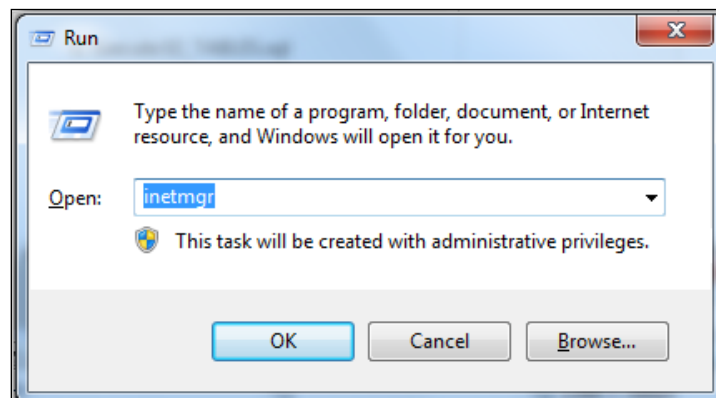
Figure 45: Accessing the inetmgr Program from the Run Window

4. To create a new Application Pool, select the **<<Server Name>>** → **Application Pools** node.

5. Right-click on the **Application Pools** node and select the **Add Application Pool** option.
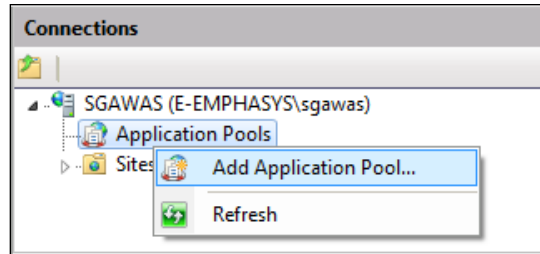
Figure 46: Accessing the Add Application Pool Option

6. The **Add Application Pool** dialog box is displayed as illustrated below.
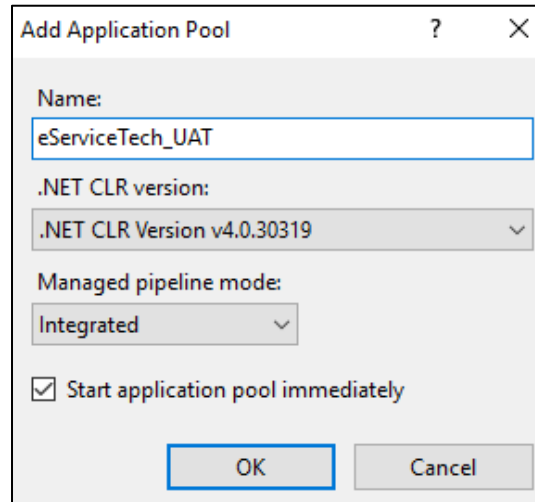
Figure 47: Add Application Pool Dialog Box

7. Enter the **Name** for the Application Pool for UAT as **eServiceTech_UAT** and as **eServiceTech_LIVE** for Live.

8. Select the **.Net Framework v4.0.30319** from the **.NET Framework version** dropdown list and select the **Integrated** option in the **Managed Pipeline Mode** dropdown.

9. Click **OK**. The above process completes the Application Pool creation process.

10. Verify the same by selecting the **Application Pools** node under the **Connections**.
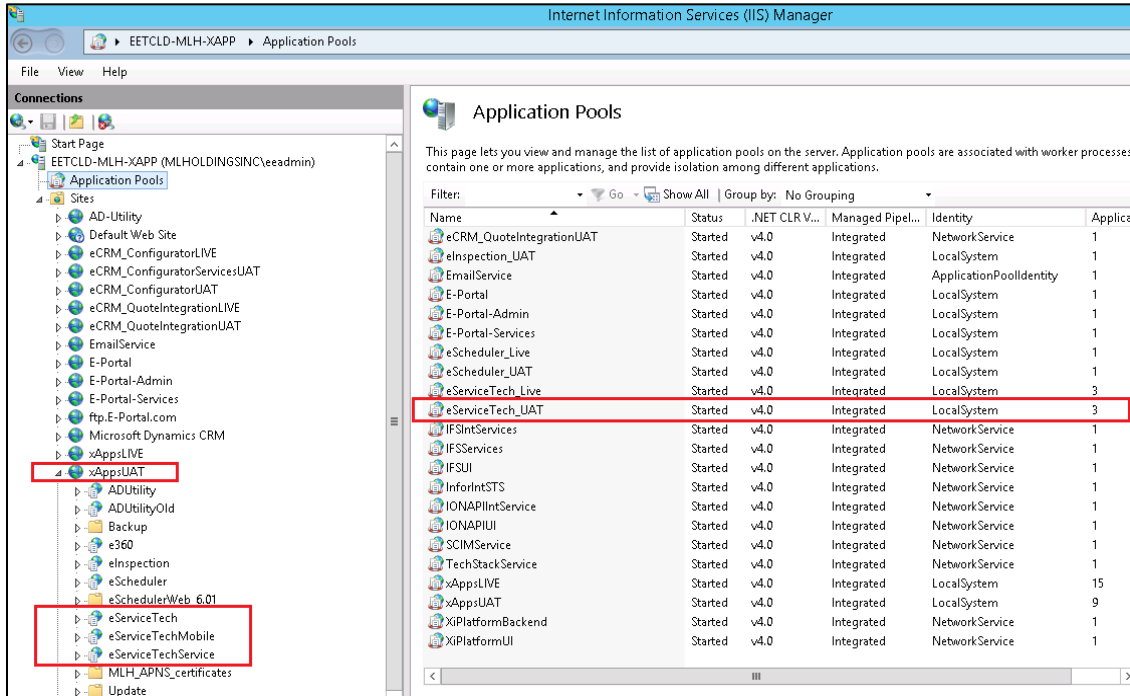
Figure 48: Verifying the created Application Pool

11. Select the application pool **eSe**
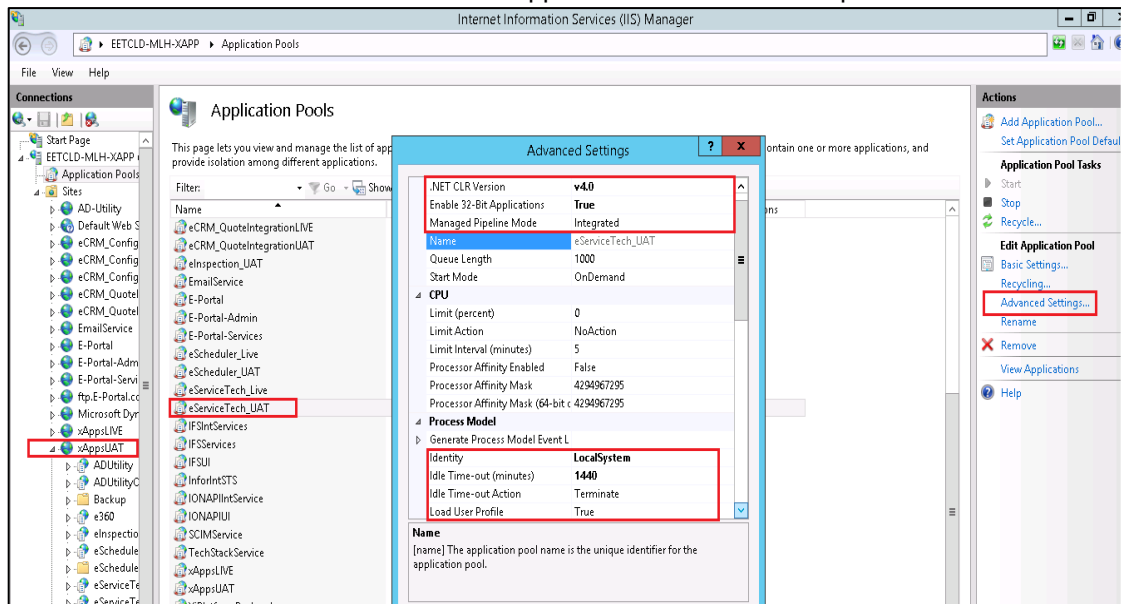
rviceTech_UAT and right-click to change the Application Pool's advanced settings.

12. Select the **Advanced Settings** option as illustrated below.

Figure 49: Application Pool's Advanced Settings

8.2   Installing eServiceTech Web app on Web Server

After the Application Pool is configured, you must create the xAppsUAT and xAppsLIVE Web Site as well as the Application.

The steps to create the xAppsUAT and xAppsLIVE Web Site as well as the Application are explained below.

1.   Right-click on the **Sites** node and click the **Add Web Site** option as illustrated below.
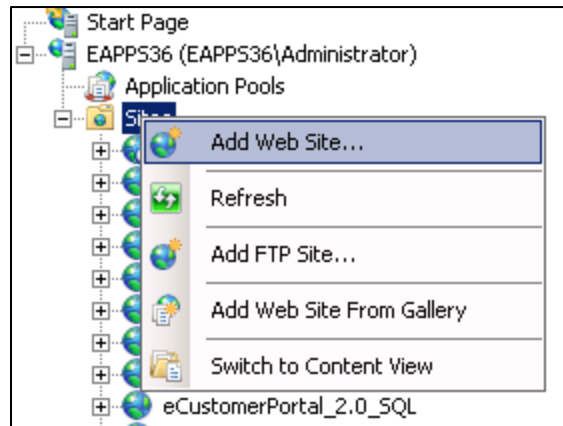
Figure 50: Accessing the Add Web Site Option

2.   The **Add Web Site** dialog box is displayed as illustrated below.
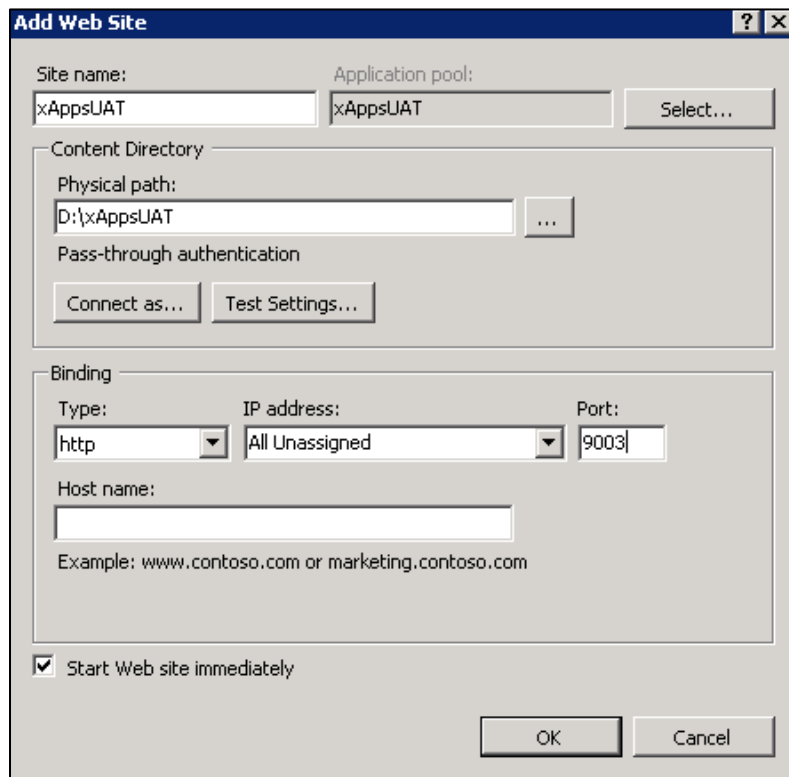
Figure 51: Add Web Site Dialog Box

3.   Enter the site name as **xAppsUAT** with **xAppsUAT** as **Application pool** name. Also enter the **Port** number as **9003** and map the required physical path. For **Upgrade**

For Fresh deployment-

We need to configure 443 (live https) & 8443(UAT – https).

We don't have to configure http port. For fresh deployment.

4. Click **OK** to add the web site. The Web Site is added as shown below.
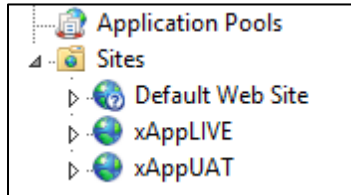
Figure 52: Web Sites Added

5. Right click on the **xAppsUAT** web site and select the **Edit Bindings** option from the context menu.
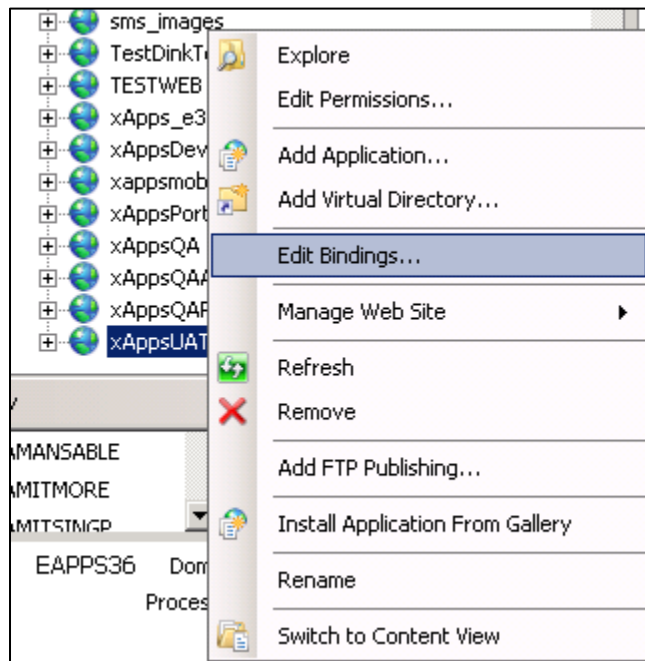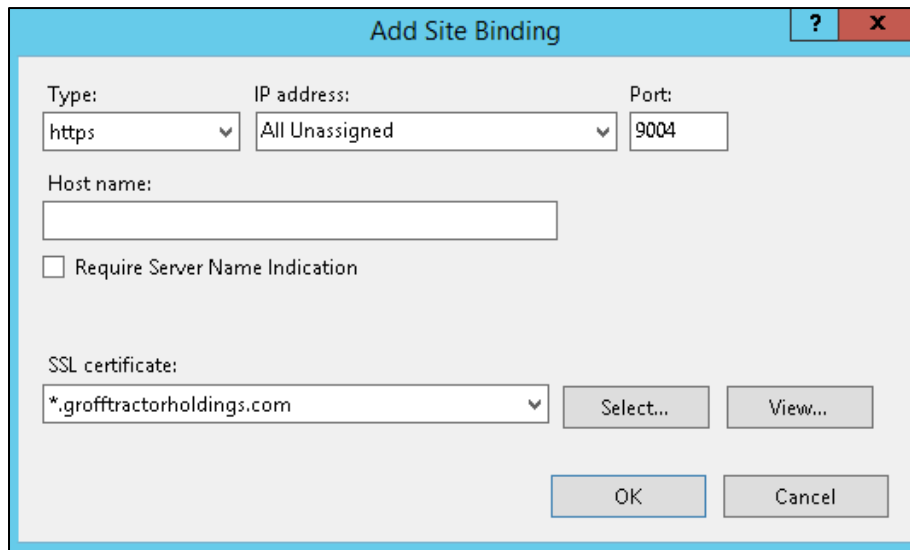
Figure 53: Accessing the Edit Bindings Menu Option

6. In the **Site Bindings** popup which opens, click the **Add** button.
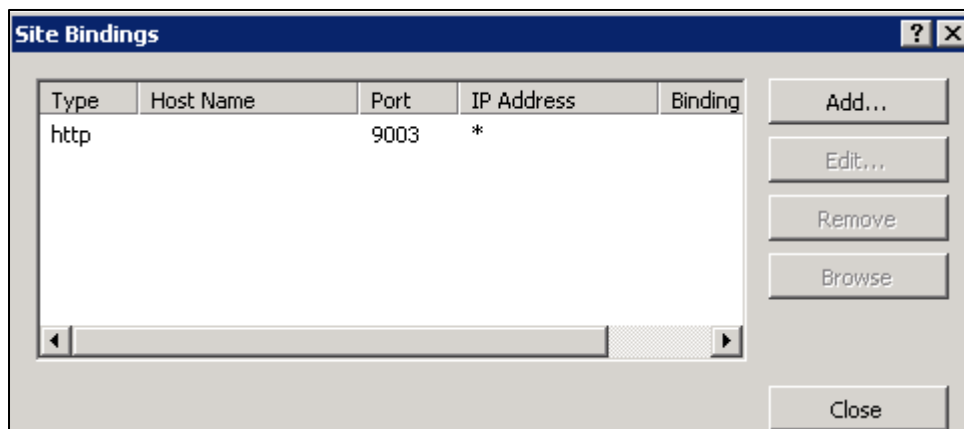
Figure 54: Site Bindings Popup

7. The **Add Site Binding** popup is displayed as illustrated below.

Figure 55: Add Site Binding Popup

8. In the **Add Site Binding** popup, select **https** as the **Type** of the port.

9. Enter the port number in the **Port** field if it is other than the default port.

> **For Upgrade Deployment**-Usually for Live, the port number is 9002 (https) and for UAT, it is 9004 (https). Also, for Live it is 9001 (http) and UAT 9003 (http). Kindly confirm from IS before configuring ports.
>
> **For Fresh Deployment**-
>
> We need to configure 443 (live https) & 8443(UAT – https).
>
> We don't have to configure http port.

10. For **SSL certificate**, select the certificate for https. If the certificate is not available, then create self-signed certificate from IIS.

11. Click **OK** to add the site binding.

12. Verify the same by checking it under the **Sites** node.

13. The Application folders should be created in secondary drive, if available. Else, they must be created in C drive. The below screens illustrate how to create the folders. The names of the application folders are also mentioned in the screens.

14. Copy application from **Common** deployment package for Web and Service and keep it on respective path.
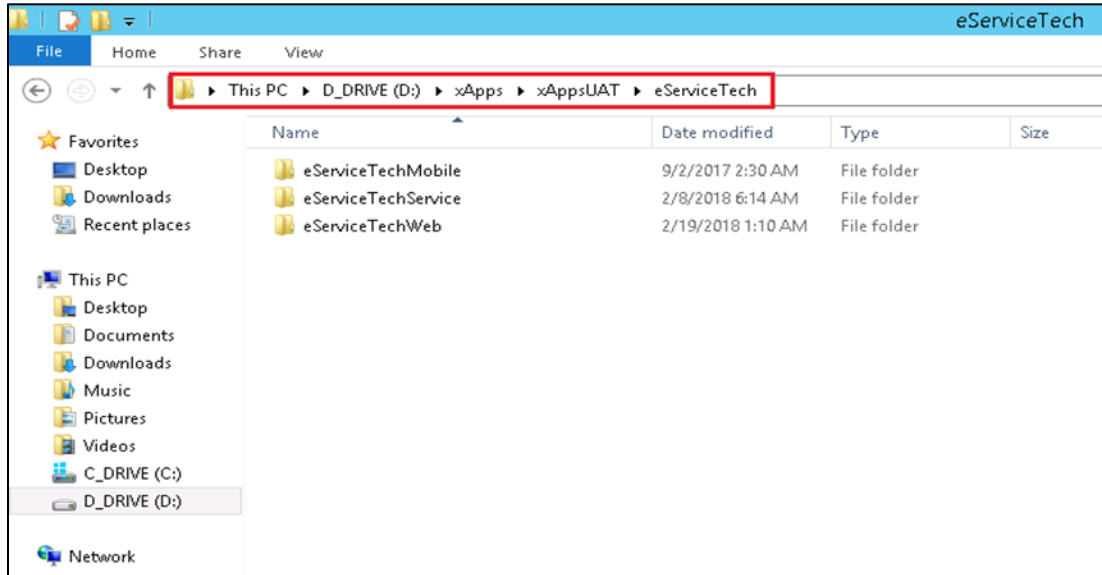
Figure 56: Creating Application Folders
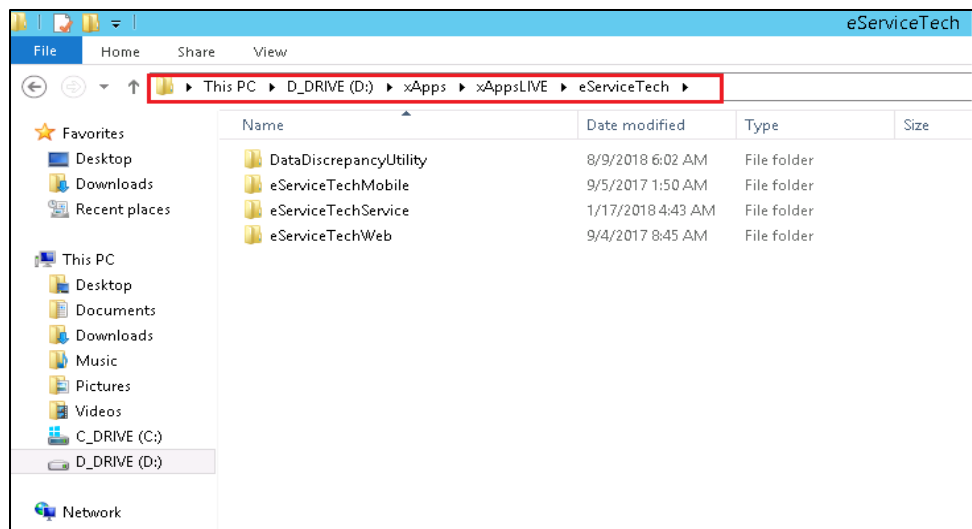
Figure 57: Creating Application Folders

15. Create the eServiceTech application by selecting the **xAppsUAT** and **xAppsLIVE** Sites.

16. Right click on **xAppsUAT** site and select the **Add Application** option as illustrated below.
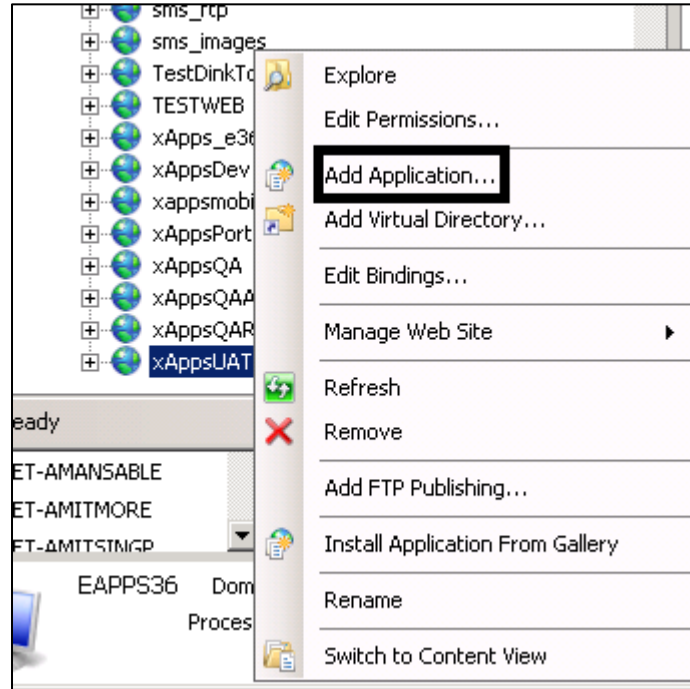
Figure 58: Accessing the Add Application Menu Option

17. In the **Add Application** popup that opens, enter the **Alias** name as **eServiceTech**.
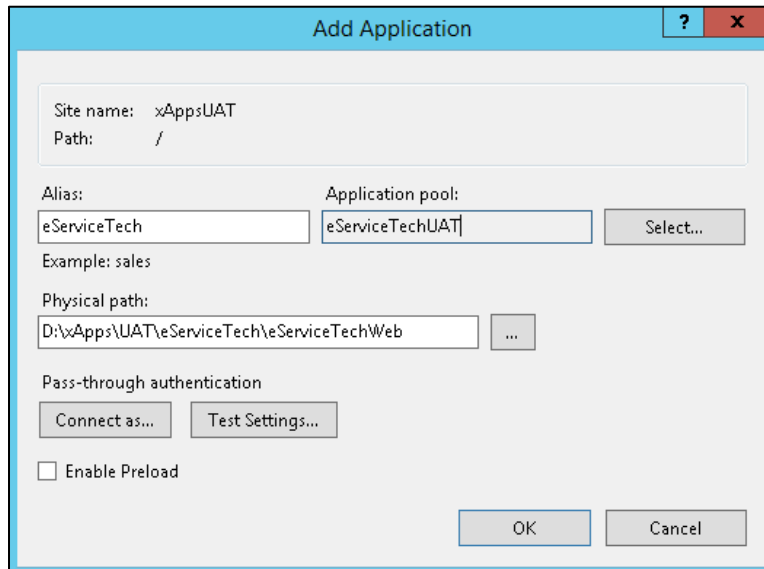
Figure 59: Add Application Popup

18. Repeat these steps for **eServiceTechService** and **eServiceTechMobile**.
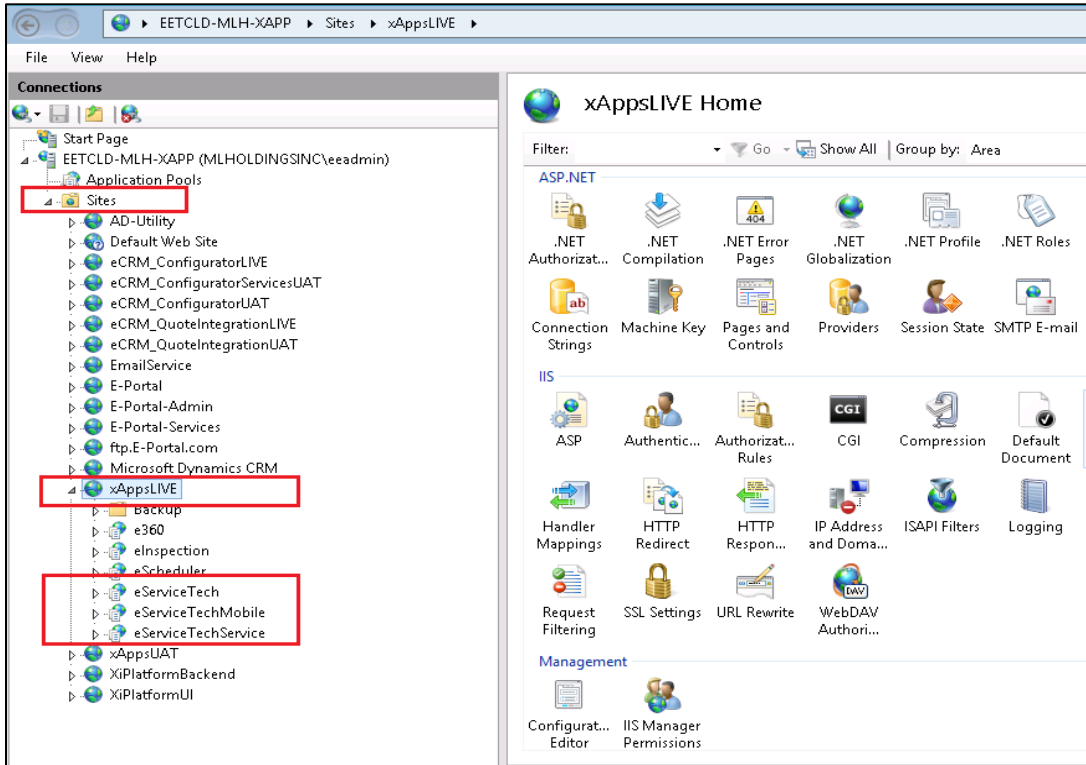
Figure 60: Adding Application

For Upgrade:

- **Service:** Do not copy the **Web.config** file and **Images** folder from the deployment package. Keep the existing files and folder in the application.
- **Web:** Do not copy the **Web.config** file from the deployment package.

8.3 Configuring MIME Types

The steps to configure MIME Types are explained below.

1. Open the Internet Information Services (IIS) Manager and navigate to the **Sites** node as illustrated below.
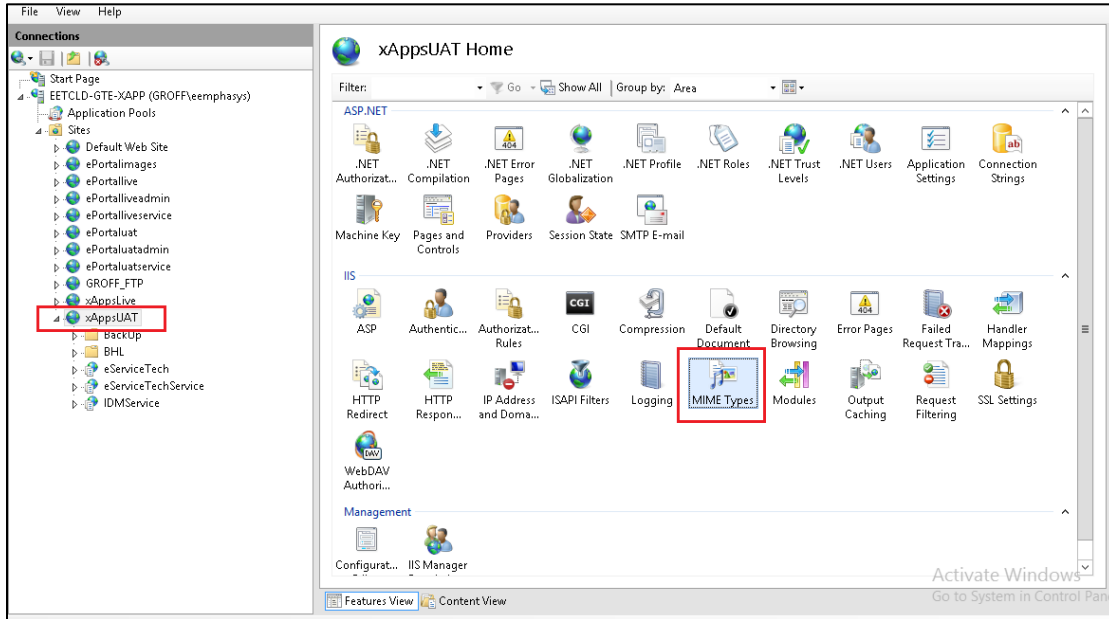
Figure 61: Internet Information Services (IIS) Manager

2. Select the **MIME Types** icon from the **Home** page and double-click it.

3. In the **Action** pane on the right-hand side, click the **Add** option. The **Add MIME Types** dialog box appears as illustrated below.
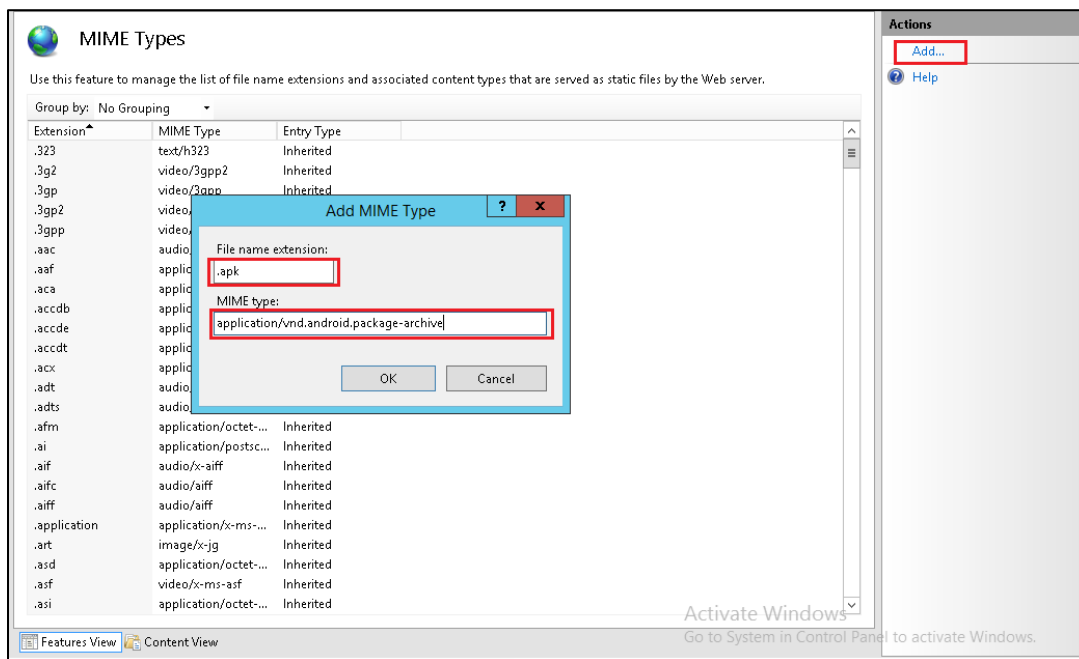
Figure 62: Add MIME Types Dialog Box

4. In the **Add MIME Types** dialog box, specify the **File name extension** and the **MIME type**.

File Name Extension	MIME Type
.ipa	application/octet-stream

File Name Extension	MIME Type
.apk	application/vnd.android.package-archive
.plist	text/plain

8.4   Configuring Database Connections

A connection string provides the information that an application must have to communicate with a particular database. A connection string usually supplies the server or location of the database, the particular database to use, and the authentication information to access the database to update the Connection Strings for database connectivity.

8.4.1   Configuring Web.config File for eServiceTechService or Service

The steps to configure the **Web.config** file for **eServiceTechService** or **Service** are explained below.

1. From the **Sites** node, open the **xAppsUAT/xAppsLive** site and select **eServiceTechService Application**.

2. Right-click and select the **Explore** option.
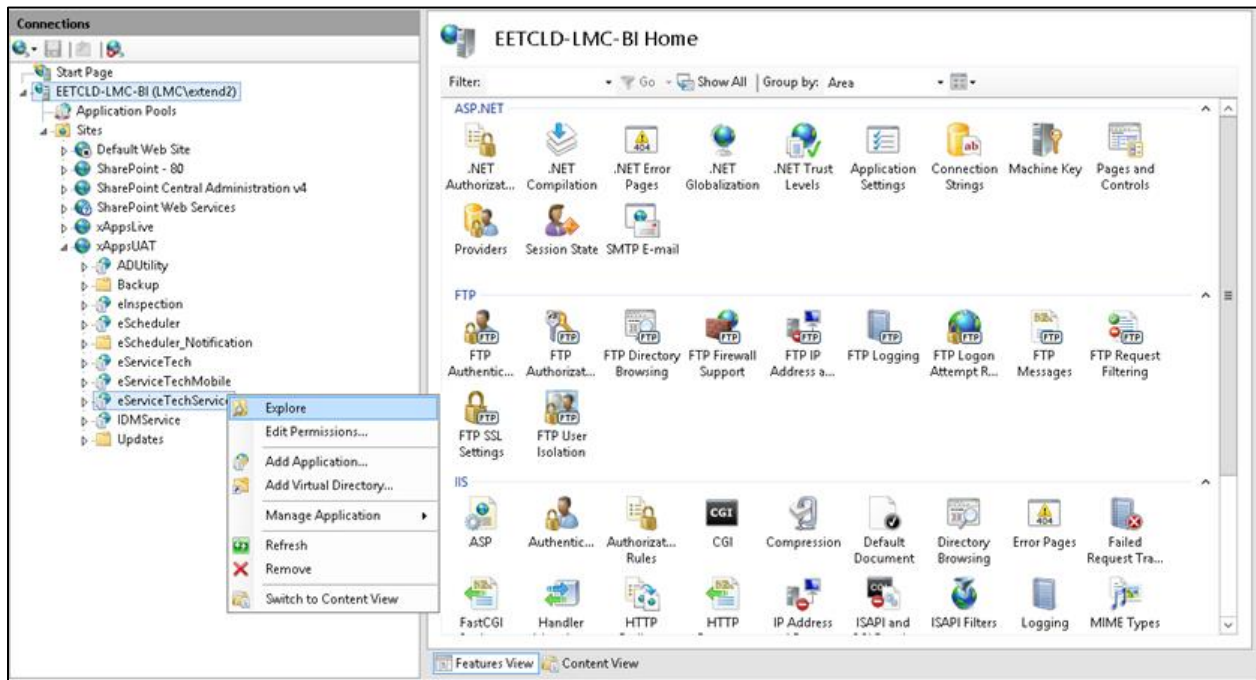
Figure 63: Accessing the Explore Option

3. The physical path is opened as illustrated below.

Figure 64: Web.config File

4. Copy Web.config file from client wise deployment package inside **Service** folder as shown in Below image. Delete existing Web.config file in **eServiceTechService** application folder and paste copied file from package.

5. Check ReadMe.txt file and performed steps as per ReadMe.txt file

8.4.2 Configuring Web.config File for eServiceTech (Web App)

The steps to configure the **Web.config** file for **eServiceTech (Web App)** are explained below.

1.Copy Web.config file from client wise deployment package inside **Web** folder as shown in Below image. Delete existing Web.config file in **eServiceTechWeb** application folder and paste copied file from package.

2. Check ReadMe.txt file and performed steps as per ReadMe.txt file

9. Deployment of eServiceTech Mobile Application

- **Only for Fresh Deployment-**

    This chapter explains the deployment of the eServiceTech Mobile Application.

    1. Copy files from the mobile folder in the deployment package and paste it in the **eServiceTechMobile** folder.
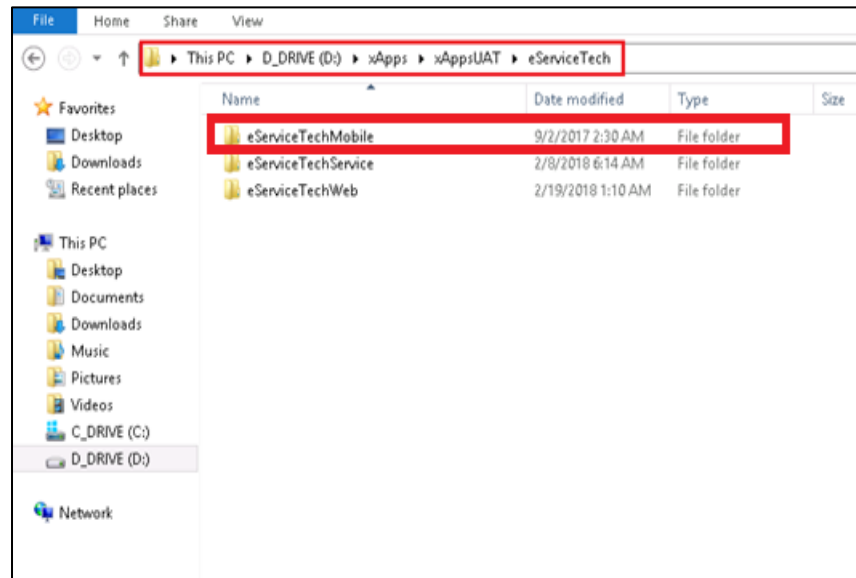
Figure 65: Copying folders

    2. Open the **index.html** file present in **eServiceTech** mobile folder in notepad.
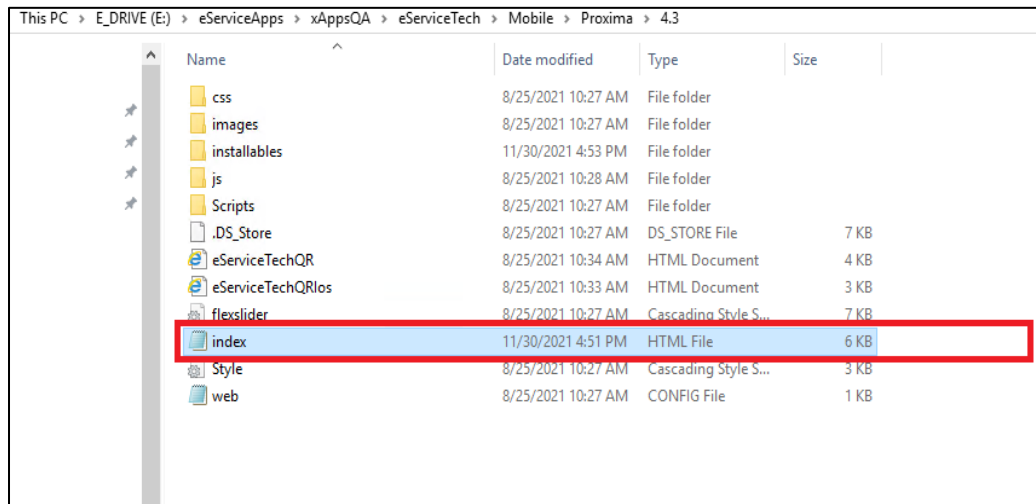
Figure 65: Index.html File

    3. Search the **header** title in the file and set the required version and environment (Live or UAT) as per requirement.

```
<body>
<div class="main">
    <div id="iosheader" class="header">
        <img src="images/topbar.png"/>
        <div class="headerTitle" >
                <b>eServiceTech</b><span class="headerSubtitle"> v4.3 (1012) Proxima </span>
        </div>
        <div class="headerLogo">
                <img src="images/eetLogo.png"/>
        </div>
    </div>
<div id="androidheader" class="header">
        <img src="images/topbar.png"/>
        <div class="headerTitle" >
                <b>eServiceTech</b><span class="headerSubtitle"> v4.3 (1025) Proxima </span>
        </div>
        <div class="headerLogo">
                <img src="images/eetLogo.png"/>
        </div>
    </div>
```
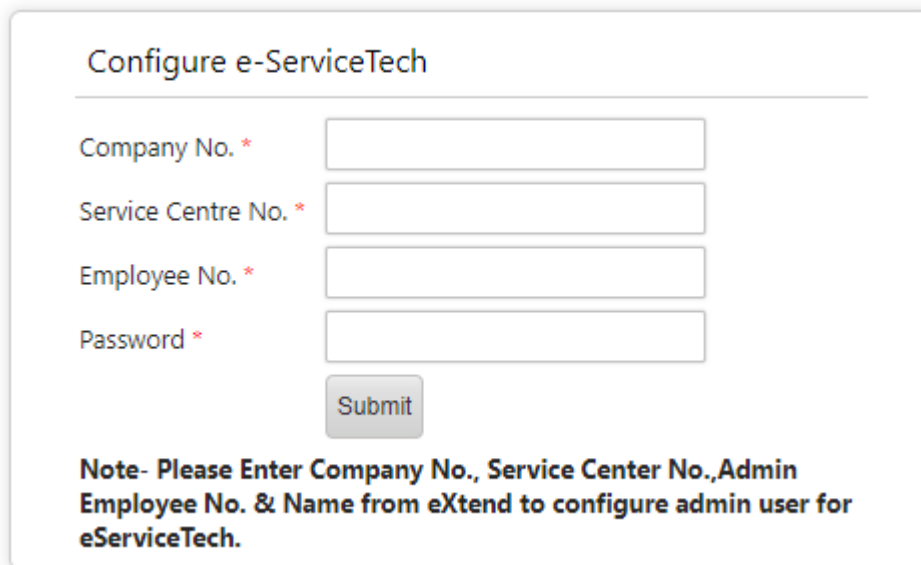
Figure 66: Setting the Version and Environment

4. Search **RedirectToIPA** in **index.html** file and replace the respective customer URL in **location.href** as highlighted in below screen.

```
function RedirectToIPA()
{
    location.href = "itms-services://?action=download-manifest&url=https://xapps1.e-emphasys.com:10000/eServiceTech/Mobile/Proxima/4.3/installables/eServiceTech.
}
function RedirectToAPK()

    location.href = "installables/eServiceTech.apk";

function RedirectToQR() {

var userAgent = navigator.userAgent || navigator.vendor || window.opera;
    var checker;
    if( userAgent.match( /iPad/i ) || userAgent.match( /iPhone/i ) || userAgent.match( /iPod/i ) )
        checker ='iOS';
```

Figure 67: Replacing Customer URL

5. Open eServiceTech.plist file in notepad and change URL and Build No as per customer as shown below-

```
<?xml version="1.0" encoding="UTF-8"?><!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTD
<dict><key>items</key><array><dict><key>assets</key>
 <array><dict><key>kind</key><string>software-package</string>
<key>url</key>
<string>https://xapps1.e-emphasys.com:10000/eServiceTech/Mobile/Proxima/4.4/installables/eServiceTech.ipa</string>
</dict>
</array>
 <key>metadata</key>
<dict>
<key>bundle-identifier</key>
<string>com.eEmphasys.eServiceTechEnterprise</string>
<key>bundle-version</key>
<string>4.4(1001)</string>
<key>kind</key>
<string>software</string>
<key>title</key>
<string>eServiceTech</string>
</dict>
</dict>          |
</array></dict></plist>
```

- **For Fresh deployment and Upgrade-**

  1.Update builds-

  Open Client Wise deployment package for respective client copy .apk and .ipa file as shown in below image and paste it inside ~\eServiceTechMobile\installables folder.

2.Update QR code image-

In client specific package you will get qr.png file

Replace that file inside eServiceTechMobile=>images folder

.DS_Store   bg   bg_old   demo apk   eetLogo   eetLogo   eetLogo_Old   qr   Thumbs   topbar

10. Performing Smoke Testing for eServiceTech Web

Smoke Testing is a testing process that determines whether the deployed software build is stable or not. This chapter explains the process of performing Smoke Testing for the eServiceTech Web after the deployment is complete to verify whether the important features are working.

The steps for performing the Smoke Testing for eServiceTech Web are explained below.

For Fresh Deployment only-

Open Configuration.aspx page.

Example-

Below is login URL for Linder UAT just shown as example instead of LoginForm.aspx use Configuration.aspx for respective client we need to use respective link.

https://e-apps.linder.com:9004/eServiceTech/LoginForm.aspx

https://e-apps.linder.com:9004/eServiceTech/Configuration.aspx

Browse configuration.aspx link on browser and fill Company No, Service Center, Employee no and Password and click on Submit button.

Now, Open login page and use employee and password you have configured just now and login into application.

For Upgrade-

Directly open eServiceTech Login Link.

Common Smoke Test Steps(Fresh & Upgrade)-

1. Open the eServiceTech link in the browser and configure the Company and Service Center.
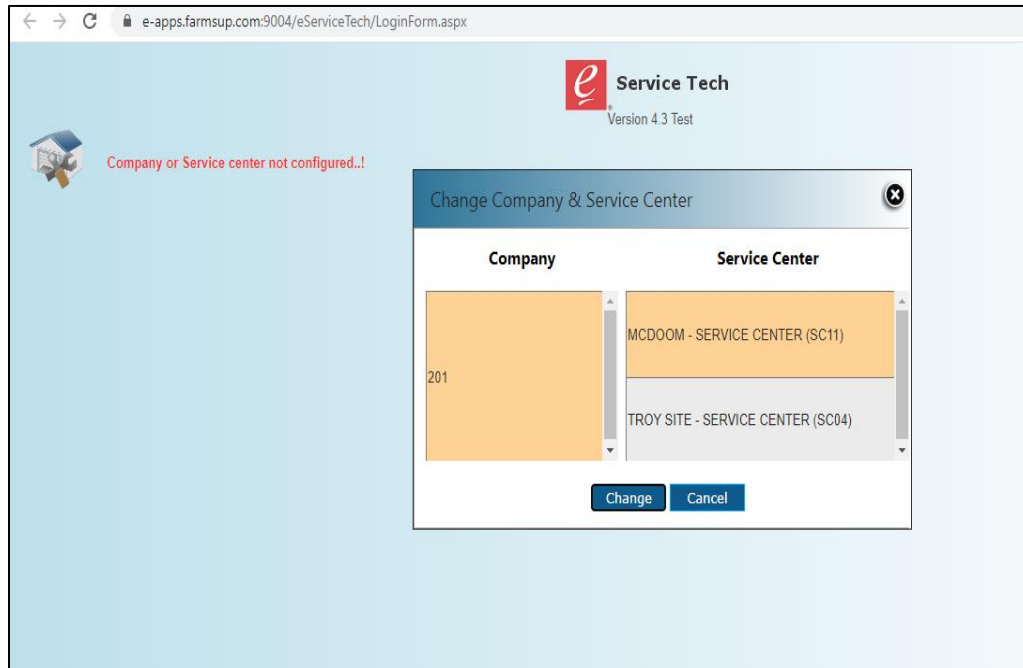
Figure 68: eServiceTech

1. Search and select the required Technician.
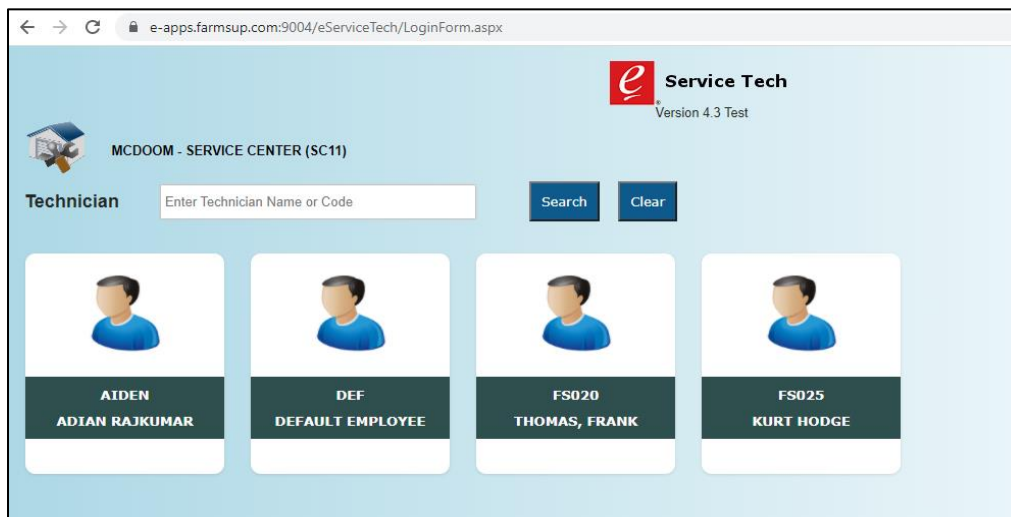
Figure 69: Selecting a Technician

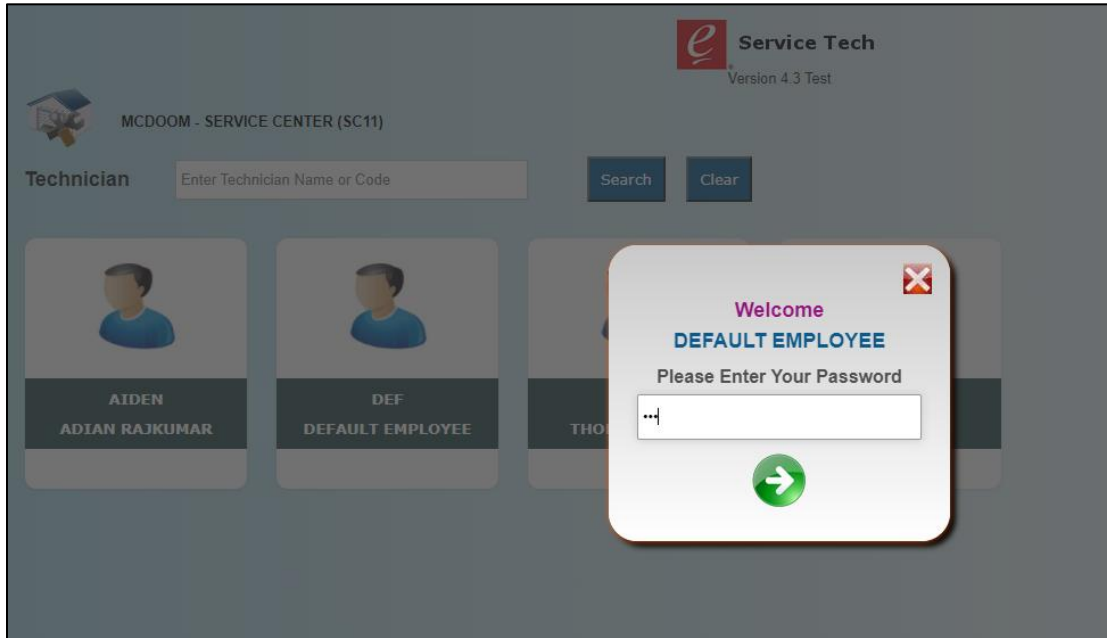2. Enter the password in the **Login** screen that opens and click ➜ to login.

Figure 70: Logging In to eServiceTech Web

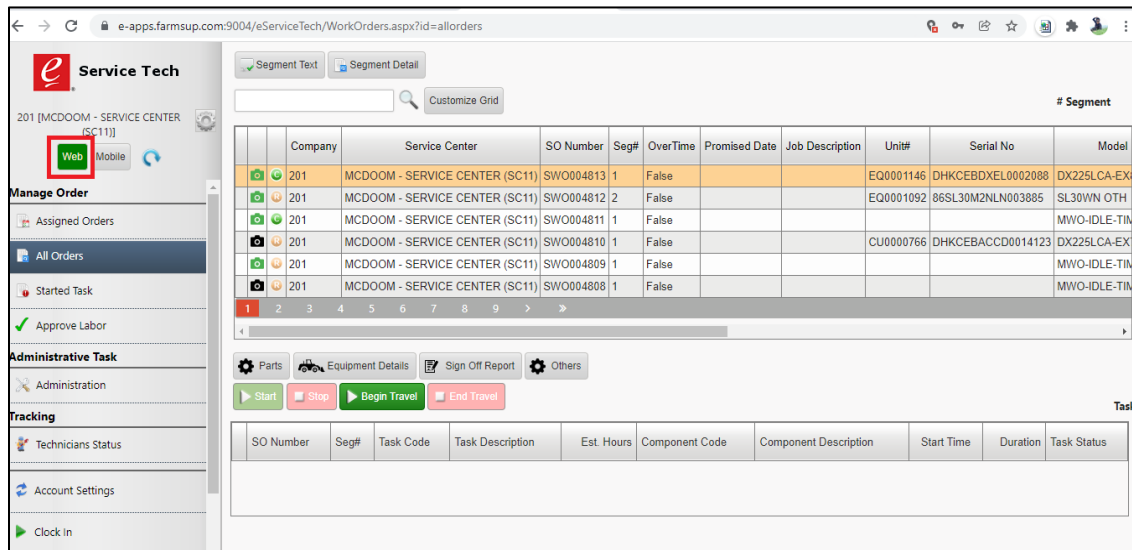3. Ensure that the **Web** option is selected as shown below. Select the **Web** button if it is not already selected.

Figure 71: Web Option

4. In the left pane, click the **Assigned Orders** option under the **Manage Order** section. The screen must open without any error.
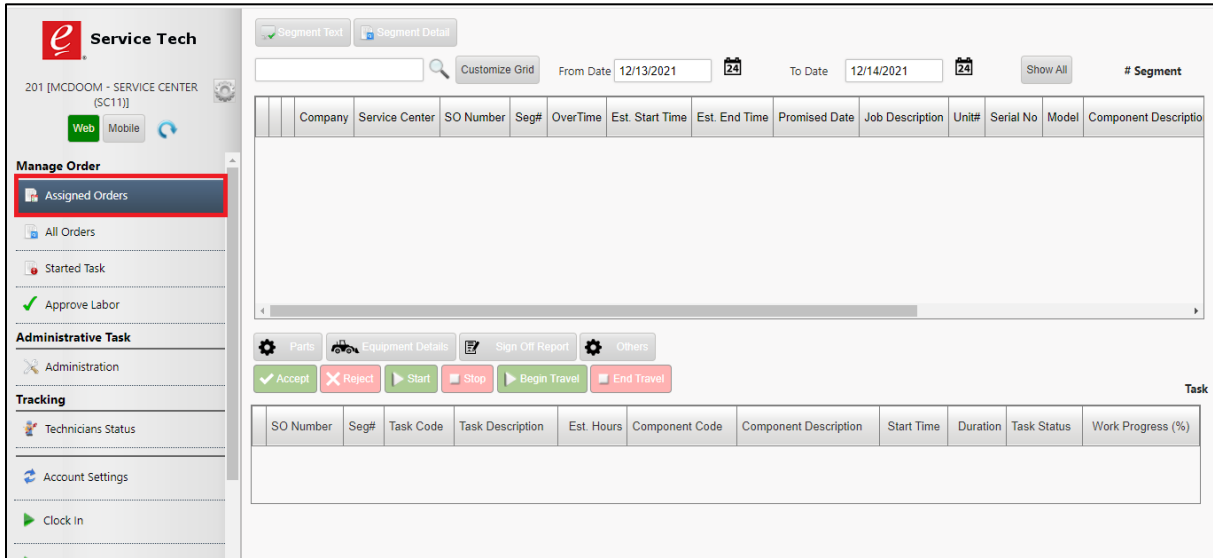
Figure 72: Viewing Assigned Orders

5. Click the **All Orders** option under the **Manage Order** section in the left pane. The screen must open without any error.
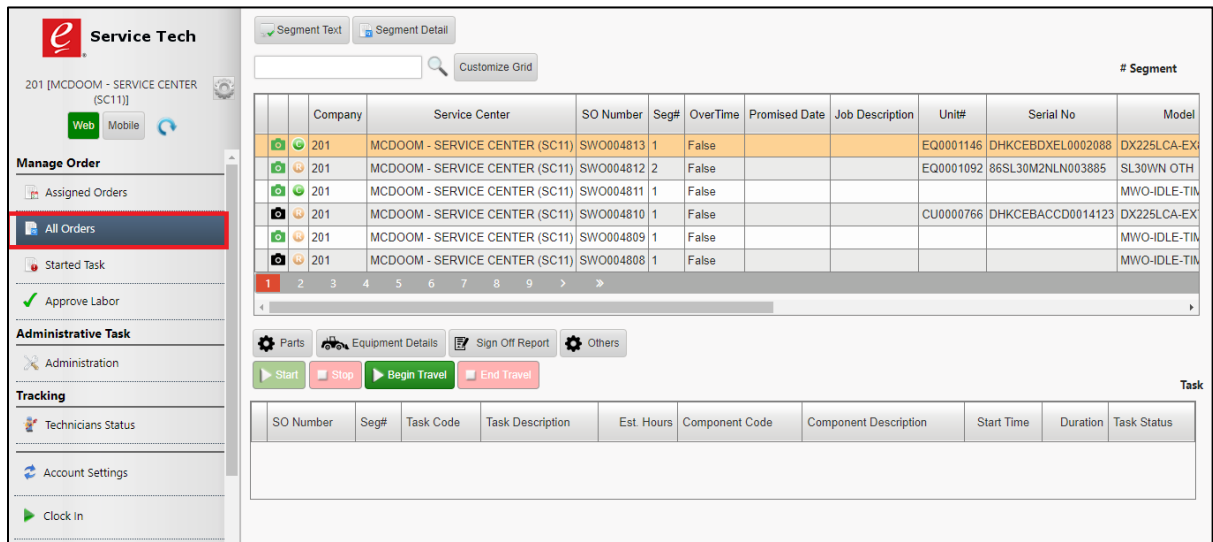
Figure 73: Viewing All Orders

6. Select an Order and click the **Segment Text** button as illustrated below.
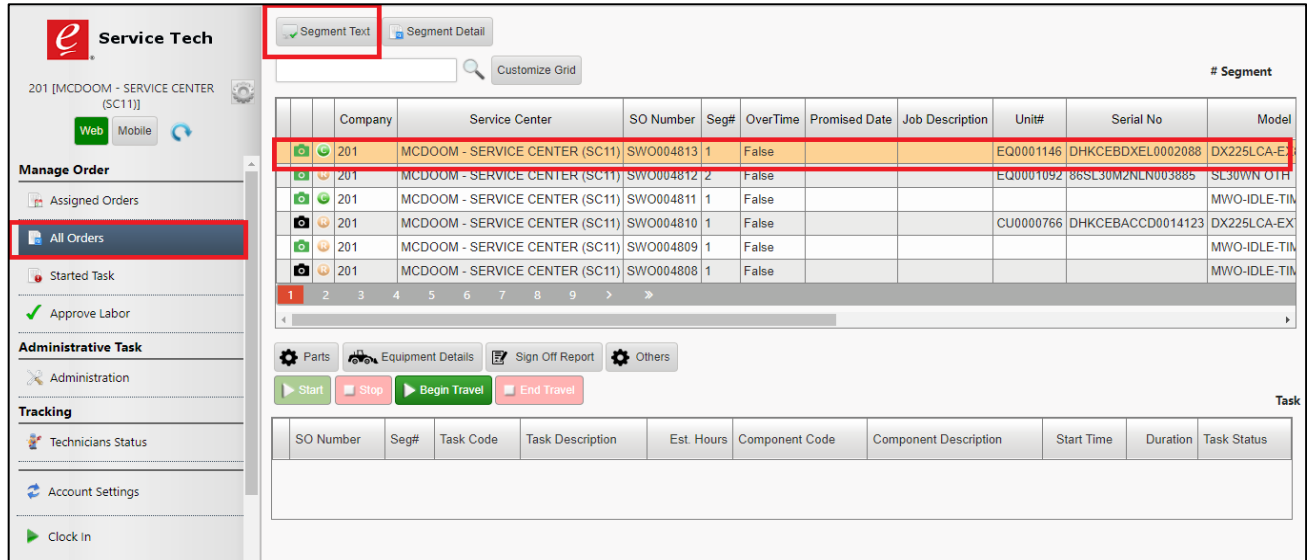
Figure 74: Viewing Segment Text

7. The **Segment Text** screen should open without any error.
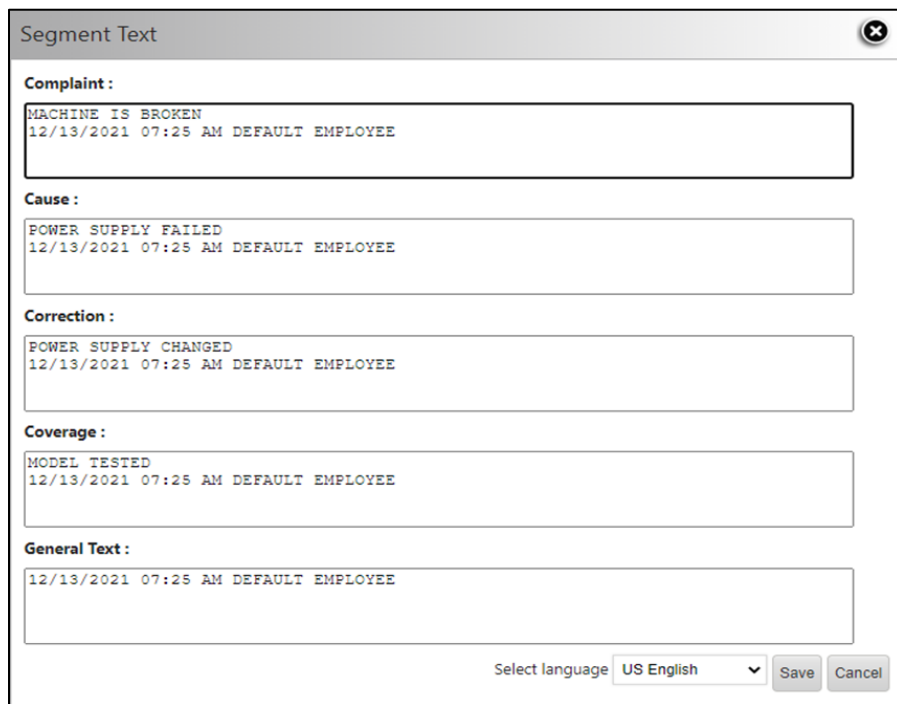
Figure 75: Segment Text Screen

8. Close the **Segment Text** screen and click the **Segment Detail** button. The **Segment Detail** screen should open without any error.

Figure 76: Segment Detail Screen

9. Click the **Approve Labor** option under the **Manage Order** section in the left pane. The screen must open without any error.

Figure 77: Approve Labor Screen

10. Click the **Administration** option under the **Administrative Task** section in the left pane and navigate through all the tabs. The screens must open without any error.
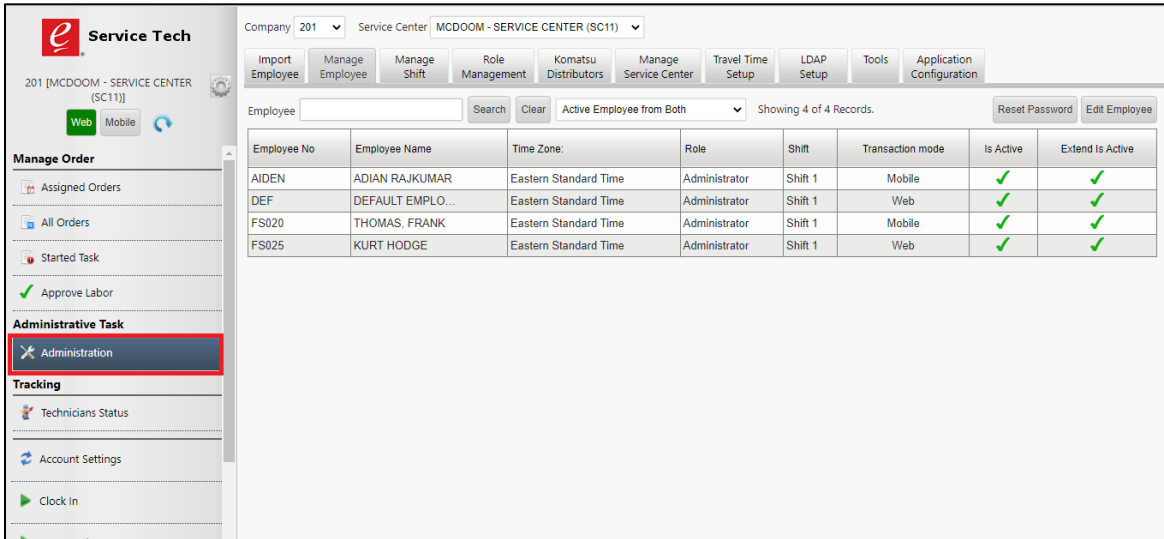
Figure 78: Accessing the Administration Screen

11. Click the **Clock in** option under the **Tracking** section in the left pane. The **Clock in** screen must open without any error.
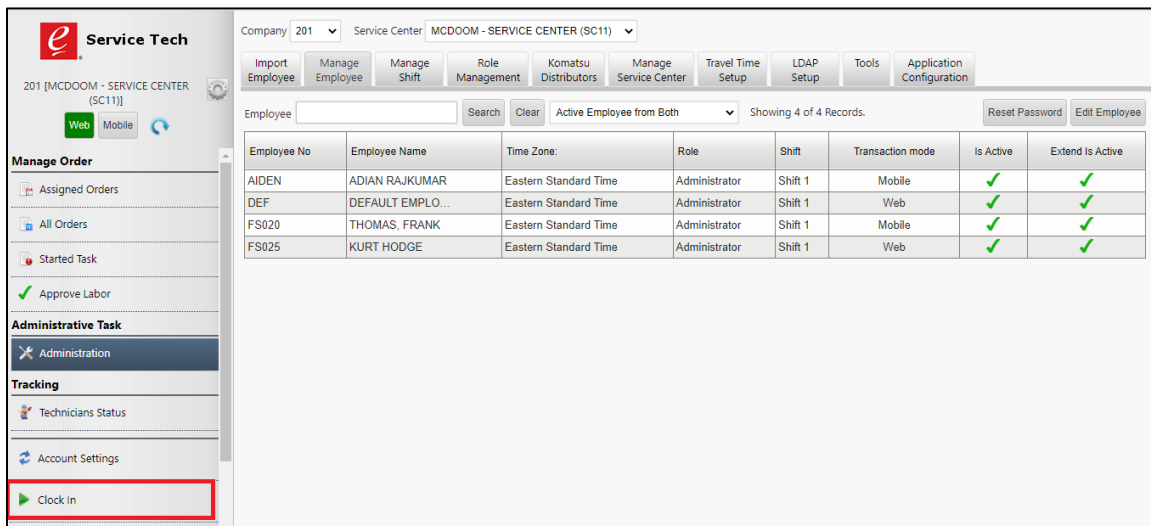
Figure 79: Accessing the Clock In Screen

12. Click the **Clock out** option under the **Tracking** section in the left pane. The **Clock out** screen must open without any error.
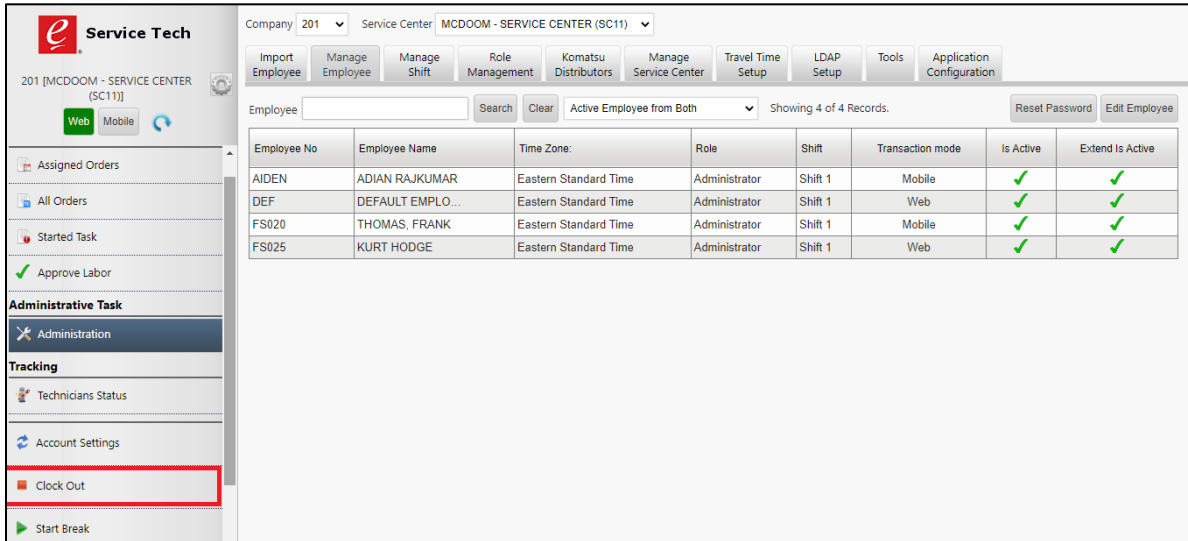
Figure 80: Accessing the Clock Out Screen

13. Click the **Start Break** option under the **Tracking** section in the left pane. The transactions should work without any error.
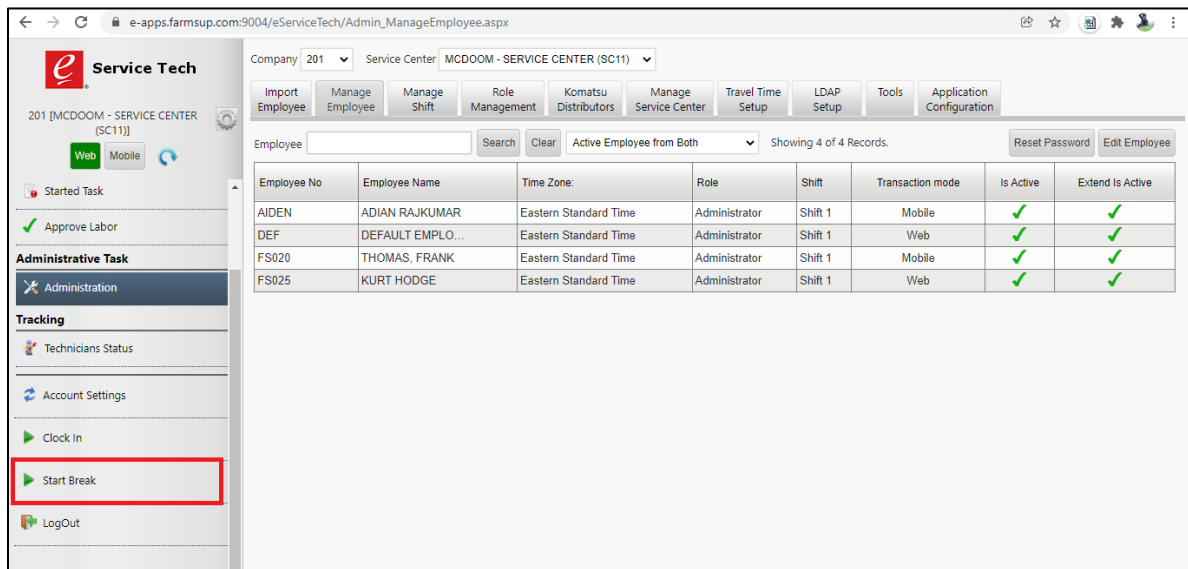
Figure 81: Accessing the Start Break Option

14. Click the **Stop Break** option under the **Tracking** section in the left pane. The transactions should work without any error.
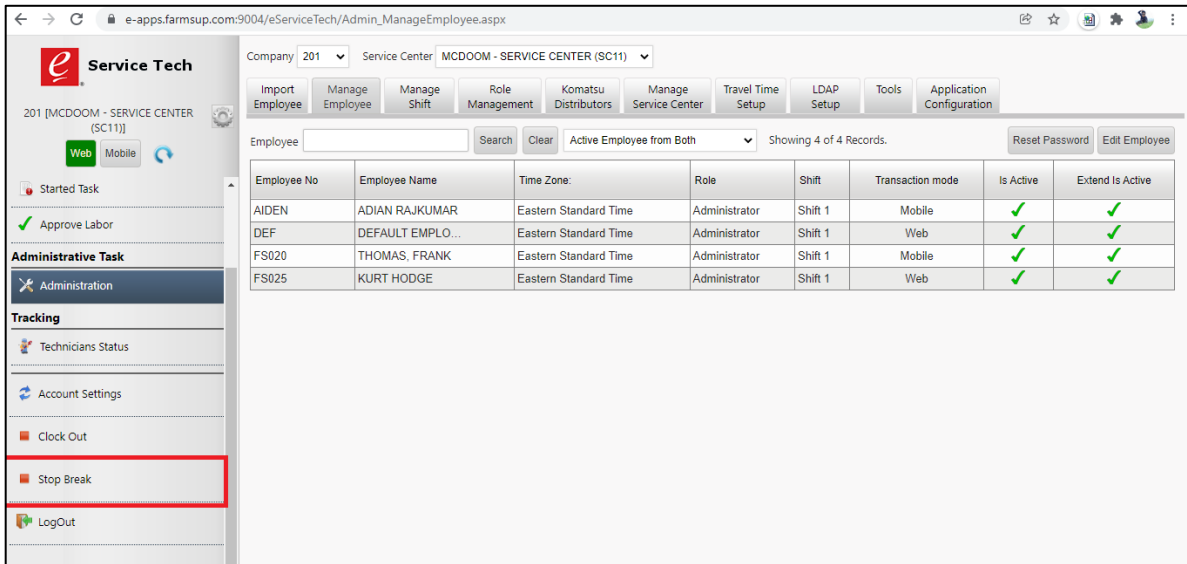
Figure 82: Accessing the Stop Break Option

15. Click on **Print Proforma Invoice** button and you will get popup with default selection as below.

Figure 83: Print Proforma Invoice Button

16. Poup will open with default options. Click on **Print Proforma Invoice** button.

Figure 84: Print Proforma Invoice Popup

Figure 85: Printed Proforma Invoice

11. Maintaining QA Email Checklist

Once all verification is done, kindly fill the below checklist. Values will be different for different clients and environment. Below is an example of Farm Supply UAT.

TO- QA xapps.qa@e-emphasys.com; Ajay Gangan agangan@e-emphasys.com

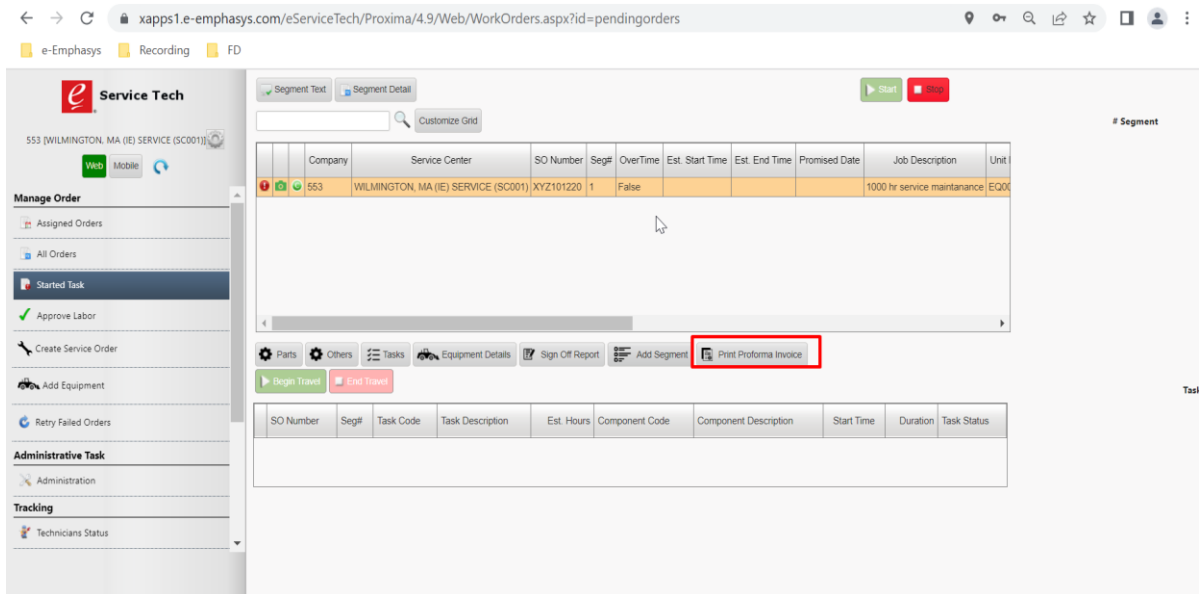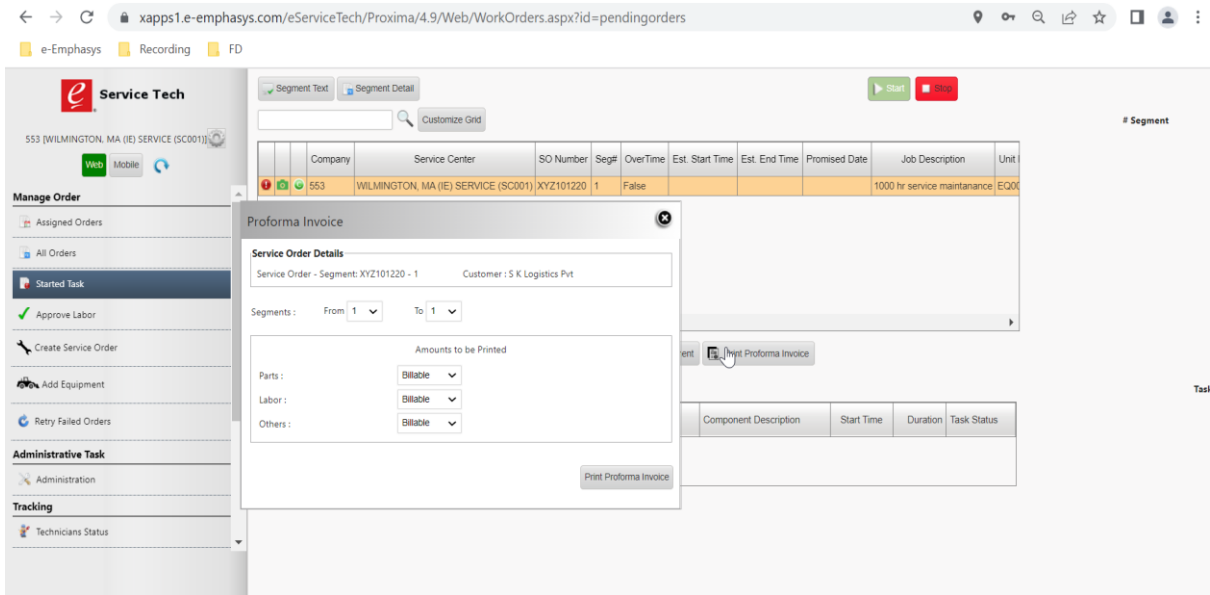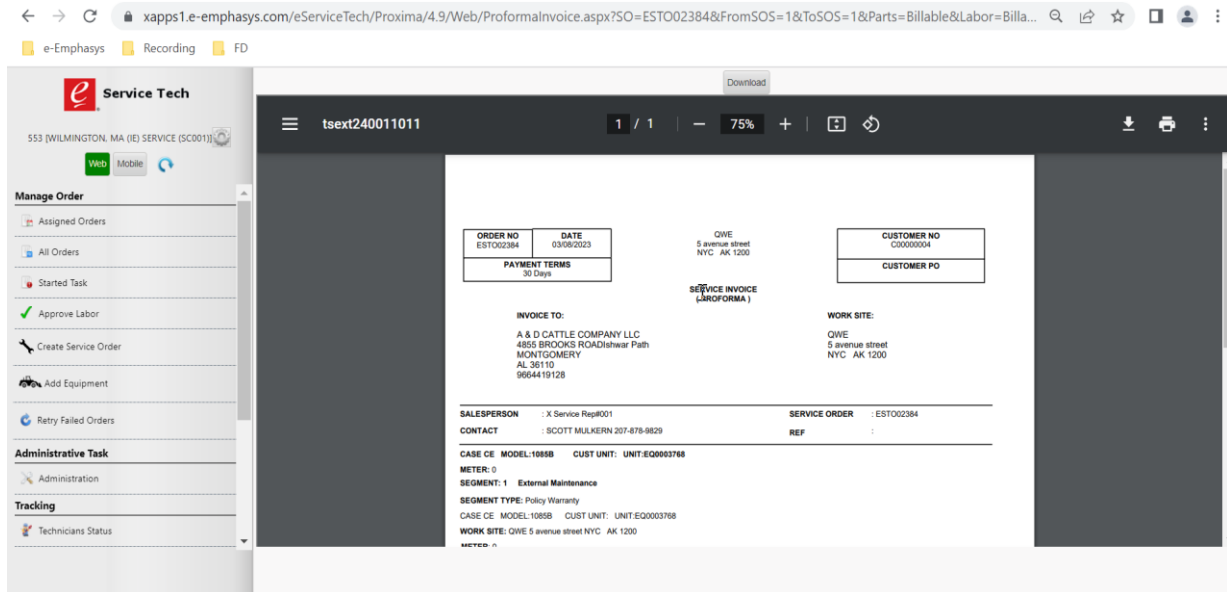**CC**- eScheduler escheduler@e-emphasys.com; eServiceTech eServiceTech@e-emphasys.com; Japheth Bandarkar jbandarkar@e-emphasys.com

Subject- eServiceTech 4.3 deployed on Farm Supply UAT

Body-

> Hi Team,
> We have deployed eServiceTech Web 4.3 version on Farm Supply UAT.
> Kindly note below points-

- NOLOCK clause is implemented in Local as well as ERP stored procedures.
- Primary key, clustered and non-clustered indexes are implemented in local database.
- Application details are present in Repository link.

Sr. No	Interface / Account Name	Applicable Yes / No	Operational Yes / No	Cause	Action Needed (None / Specify action)	Action By (EET AM / EET Product / EET IS / Customer)
1	Google Maps	Yes	Yes	NA	NA	NA
2	Emails	Yes	Yes	NA	NA	NA
3	IDM	Yes	Yes	NA	NA	NA
4	Apple Account (EET)	Yes	Yes	NA	Customer needs to provide apple account details, currently we have plugged in EET apple account details on temporary basis	Customer success Manager
5	SMS	Yes	NO	Customer has not provided Twil	Customer needs to provide	Account Manager

Sr. No	Interface / Account Name	Applicable Yes / No	Operational Yes / No	Cause	Action Needed (None / Specify action)	Action By (EET AM / EET Product / EET IS / Customer)
				io account details	Twilio account details	
6	Video Call	NA	NA	NA	NA	NA
7	Payment Gateway	NA	NA	NA	NA	NA

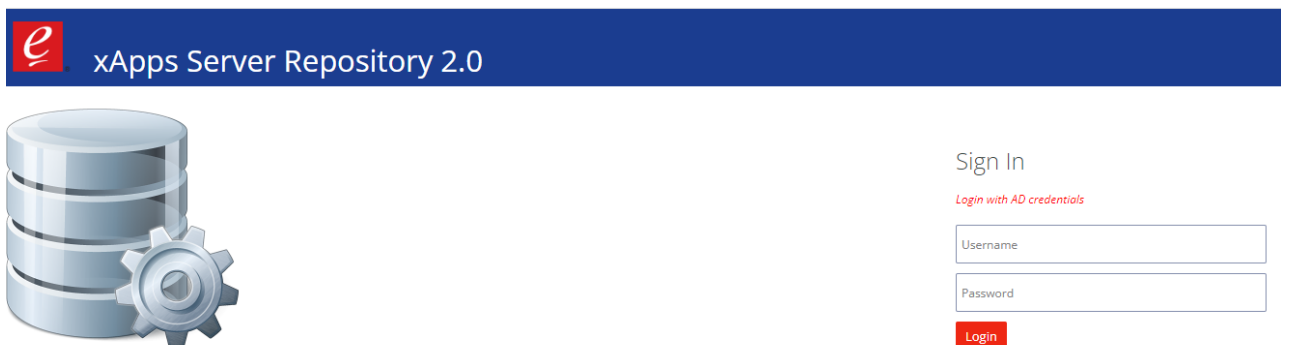| Sr. No	Description	Farm Supply UAT 4.3(Date)
1	Application folders created as per standard structure	Yes
2	Application builds copied in application folders	Yes
3	Web applications created in IIS as per standard app structure	Yes
4	Take application backup in case of Update	Yes
5	Take Local Database Backup in case of Update	Yes
6	App Pool created for eServiceTech UAT/Live	Yes
7	Enable 32 bit Application in App pool	Yes
8	Set Identity as "Local System" in app pool	Local System
9	Set Ideal Time-out 1440 in App Pool	1440
10	Adding apk, ipa, plist mime types at xAppsUAT/xAppsLive application level	Yes
11	Configure service url in Web app web.config	Yes (https://e-apps.farmsup.com:9004/eServiceTech/eServiceTechService)
12	Set app version in Web app web.config	Yes(4.3)
13	Configure connection string service web.config	Yes
14	Configure BDEs in service web.config	Yes
15	Configure BHL / IDM	Yes (IDM)
16	Set suffix for eServiceTech / eScheduler	Yes eST(4.3) eSch(8.2.4)
17	Add eScheduler Assignment Service URL in service web config	Yes (https://e-apps.farmsup.com:9004/eScheduler/Service/Assignments.svc)
18	Set IsWebAppEnabled as True in Service Web Config	TRUE
19	Set TravelDelayEnabled as false in Service Web Config	TRUE
20	Set SendEmpCodeForOthersBDE as false in Service Web Config	Yes

Sr. No	Description	Farm Supply UAT 4.3(Date)
21	Set AllTechInSignoff as false in Service Web Config	Yes
22	Set OldDocumentManagment as false in Service Web Config	Yes
23	Set ShowSegmentTextPopup as false in Service Web Config	Yes
24	Set ApplicationIdMeterReadingBDE as 20 in Service Web Config	20
25	Set TextInSingleBDEArrayElement as false in Service Web Config	TRUE
26	Set Dealer as Customer Name in Service Web Config	FSL
27	Set ShowAllServiceCenter as true in Service Web Config	Yes
28	Set BDETimeout as 15 in Service Web Config	Yes
29	Set SendWOCompleteMail as false in Service Web Config	TRUE
30	Set SendWOCompleteSMS as false in Service Web Config	Yes
31	Set EnableNlog as false in Service Web Config	Yes
32	Set BDESourceApp as EST in Service Web Config	EST
33	Set SendLaborData as false in Service Web Config	Yes
34	Set EnableStagingUpload as true in Service Web Config	Yes
35	Set StagingFolderPath same as xApps folder path	D:\xAppsUAT\eServiceTech\StagingFolder\{UnitNo}\SERVICE FILE\{SO}\{SOS}
36	Set AndroidNotifyURL as https://fcm.googleapis.com/fcm/send in Service Web Config	https://fcm.googleapis.com/fcm/send
37	Set QuickLMSEnabled as false in Service Web Config	TRUE
38	Set SendLaborData as false in Service Web Config	TRUE
39	Set HideCompletedOrders as false in Service Web Config	Yes
40	Set ShowAlarmCodes as false in Service Web Config	Yes
41	local database with SQL_Latin1_General_CP1_CI_AS collation	Yes
42	Versioned extend proc created in extend/local database	Yes

Sr. No	Description	Farm Supply UAT 4.3(Date)
43	Adding all the details in Repository	Yes
44	Update Local stored procedures with version	Yes
45	nLog Database need to create in Single User Mode	Yes
Database (Master Configdata)		
46	eVAWindowStyle	
47	LicenseType	None
48	DealerCode	
49	EnvironmentCode	UAT
50	Addition of index on IDM table and corresponding store procedure change in eServiceTech	
51	Store signature on Mobile	

- ## Update Link Repository-

  1.Open below link in browser-

  https://xapps1.e-emphasys.com:10000/LinkRepository/Admin/Default.aspx

  2.Login with your credentials.

3. Click on xApps Link Repository tab-

- **Fresh Deployment-**
    - i)   For fresh deployment click on Add Repository-

    - ii)   Add details as shown in below image and click on save button-

User Management   Demo Schedule   xApps Link Repository   Customer Management   Download Documents   Server Management

Application Links

Fields marked with (*) are mandatory

Customer	Linder
Product	eServiceTech Web
Version	4.5
Language	English
Type*	UAT Application
Link*	apps.linder.com:9004/eServiceTech/ LoginForm.aspx
UserName	001
Password	eet
Comments	Company-100 Service Center-SC001
Licensed user count	0

Save   Cancel

Customer	Linder
Product	eServiceTech Web
Version	4.5
Language	English
Type*	UAT Application
Link*	apps.linder.com:9004/eServiceTech/ LoginForm.aspx
UserName	001
Password	eet
Comments	Company-100 Service Center-SE001
Licensed user count	0

iii)   Set Type- UAT Application or Live Application as per requirement above example is shown for Linder UAT.

- **Upgrade –**

  i) After login and clicking on xApps Link Repository.

  ii)Select required customer and eServiceTech Web product and click on Edit button for record you want to edit.

Customer	Product	Version	Type	Link	Username	Password	Licensed User Count	Comments	Updated	Edit	Delete
Linder	eServiceTech Web	3.6.2.1	Live Application	https://e-apps.linder.com:9002/eServiceTech/LoginForm.aspx	000207	Linder#1	0	Company : 100 Service Center : PLANT CITY-SERVICE	9/20/2020 4:35:27 PM	Edit	Delete
Linder	eServiceTech Web	4.3	UAT Application	https://e-apps.linder.com:9004/eServiceTech/LoginForm.aspx	000207	eet	0	Company : 100 Service Center : PLANT CITY-SERVICE	1/19/2022 6:47:35 PM	Edit	Delete

iii)Update Version and other details if any and click on Save.