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PO.ECIL, HYDERABAD - 500 062.**


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User Manuel OF ECSCADA – WEB APPLICATION

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Electronics Corporation of India Limited (ECIL)

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VERSION SHEET

S. No	Version No	Date	Remarks	Changed By
1.	1.0.0		Initial Version	




 <p>SPT EC ELECTRONICS CORPORATION OF INDIAN LIMITED A Govt. Of India (Dept. of Atomic Energy) Enterprise</p>	User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD	Version No: Draft <hr/> Date: 22/08/2020
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Table of Contents

VERSION SHEET	i
Table of Contents	ii
1. INTRODUCTION	1
1.1. PURPOSE	1
1.2. SCOPE	1
1.3. ASSUMPTIONS AND TOLERANCES	1
1.4. ACRONYMS and ABBREVIATIONS	1
1.5. REFERENCE DOCUMENTS	1
2. WEB APPLICATION OVERVIEW	2
3. Deployment And Installation	4
3.1 server.....	4
3.1.1 Software Requirements	4
3.1.2 Installation Procedure	5
3.1.2.1 Installation Process for SSMS 2018.....	5
3.1.2.2 Installation process for Visual studio 2019.....	12
3.1.2.3 Installation for visual studio Code 2019	18
3.1.2.3 Installation Process for React Packages	22
3.2 Client.....	23
3.2.1 Software Requirements	23
3.2.2 Installation Procedure	23
3.2.2.1 Installation Process for SSMS 2018.....	23
3.2.2.2 Installation process for Visual studio 2019.....	23
3.2.2.3 Installation for visual studio Code 2019	23
3.2.2.4 Installation Process for React Packages	23
4. Configurations.....	26
4.1 APIs Configuration	26
4.2 XML File Configuration	26
4.3 Reports Configuration.....	26
4.4 Batch Jobs Configuration.....	26
4.4.1 Ssis package process	26
4.4.2 Creating sql job	26
5. Application Build Process.....	35

 <p>SPT EC ELECTRONICS CORPORATION OF INDIAN LIMITED A Govt. Of India (Dept. of Atomic Energy) Enterprise</p>	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>		<p>Version No: Draft</p> <hr/> <p>Date: 22/08/2020</p>
--	--	--	--

5.1	Web server Build Process	35
5.2	Web Client Build Process	35
5.3	Web APIs Build Process	35
5.4	Batch Jobs Run Process	40
6.	APIs	1
6.1	List of Server APIs.....	1
6.2	Client APIs.....	4

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

1. INTRODUCTION

1.1. PURPOSE

The purpose of this document is to present a detailed description of the designs of the SCADA HMI web application solution. Firstly, this document is intended for the programming group, to use the designs as guidelines to implement the project. Equally, this document is also for the team's instructor, as it fulfils one of the requirements of the project. Lastly, this document could be used for designers who try to upgrade or modify the present design of the SCADA HMI system.

1.2. SCOPE

This document gives a detailed description of the software architecture of the inventory system. It specifies the structure and design of some of the modules discussed in the SRS. It also displays some of the use cases that had transformed into sequential and activity diagrams. The class diagrams show how the programming team would implement the specific module.

1.3. ASSUMPTIONS AND TOLERANCES


- 1) IT Infrastructure / Data Centre specific activities
- 2) IT Hardware related issues or providing any hardware
- 3) Any Software maintenance other than the deployed Software during support phase
- 4) Other activities not mentioned explicitly in in-scope

1.4. ACRONYMS and ABBREVIATIONS

NIL

1.5. REFERENCE DOCUMENTS

S. No	Document No.	Document Title	Prepared by
1	ECIL/PUR/U-6905/D/5014	Scope document – Purchase order	ECIL-CNID

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

2. WEB APPLICATION OVERVIEW

ECSCADA is indigenously developed by ECIL Hyderabad with SCADA package for monitoring and controlling various process plants and industries. ECSCADA contains desktop-based HMI/MMI with graphics editor tool. Minimal functional ECSCADA web server is also available, and data shall be transferred to web server from ECSCADA main server. Unical must design and develop the ECSCADA web application which will be running on all browsers.


The proposed SCADA Webserver application shall be developed as client -server architecture and details of each System is mentioned below.

Server Module: The server module shall run on Webserver. This module shall collect the SCADA data and monitored parameters as metadata structure. This module shall be used to transforming the designer model forms into webpages using XML / JSON Schemas. The alarm related data and trend values shall also be captured.

Unical Identified the below mentioned functional modules for the implementation of ECSCADA Webserver application.

1. User Management Module.
2. Project Management Module
3. Model Transformation Module
4. Project Configuration Module
5. Alarms Module
6. Events Module
7. Components Module
8. Communication Module
9. Security Module
10. Reports Module

Client Module: The Client module shall be intended to be used by SCADA personal to access SCADA data on their webs. This shall facilitate the user to access data from their web devices. SCADA Web application should provide access control systems on-the-go and interact with real time SCADA

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

devices of power plant monitoring system to increase the efficiency and downtime data using PDAs / Web from anywhere at any time. Web phone application shall request the Web Server every minute for the recent values to be sent. These values shall be stored in the Web Database further analysis and display purpose.

Unical Identified the below mentioned functional modules for the implementation of ECSCADA Webserver application.

1. User Authentication Module.
2. Model Display Module
3. Data Visualization Module (Trends)
4. Alarm Management Module
5. Events Module
6. Components Module
7. Communication Module
8. Security Module
9. Timer Module
10. Settings / Configuration Module
11. Reports Module
12. Help Module

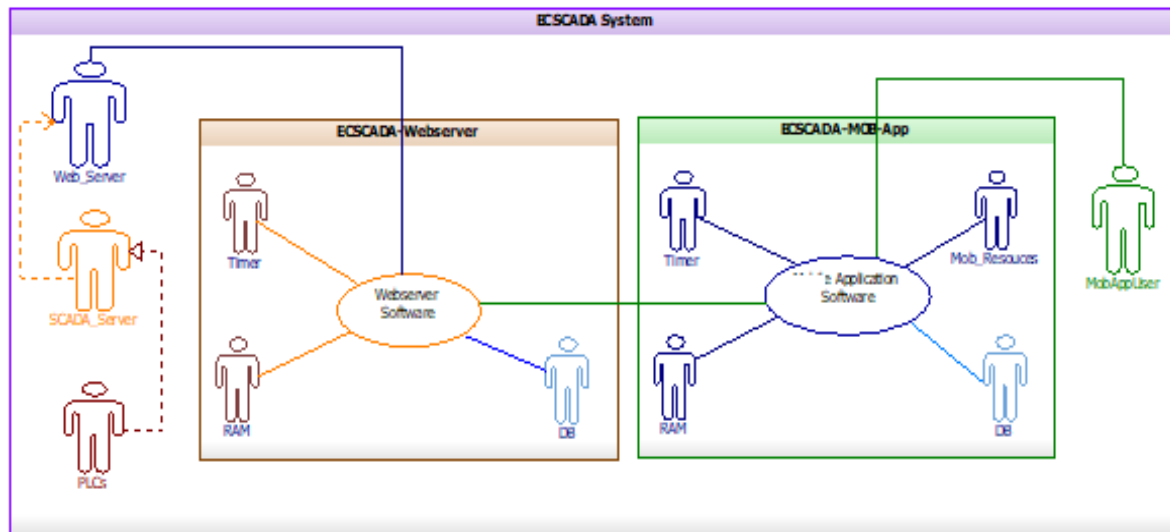


Figure 1: Context diagram of ECSCADA Web Application System

3. Deployment And Installation

ECSCADA HMI web application implemented in the below mentioned technologies.

- 1) UI Development - React Js
- 2) APIs Development – ASP.Net MVC, 4.0 and Node Js
- 3) Database – SQL Server


Server and Clients are supposed to be in the same domain. If they are in the different domain switch/router level settings has to be changed for enabling multicasting among multiple switches/routers.

3.1server

Server application is provided as an executable. It should be run in a system where data is monitored through web application. This application acts as a source of data for all the available clients. A server is a computer program or device that provides a service to another computer program and its user, also known as the client. ... A given application in a computer might function as a client with requests for services from other programs and as a server of requests from other programs.

3.1.1 Software Requirements

S. No	Description	Installation Software
1	UI Development	Visual studio 2019 & Visual studio Code2019

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

2	APIs Development	Visual studio 2019
3	Database –	SSMS 2018

3.1.2 Installation Procedure

The act or process of making a machine, a service, etc., ready to be used in a certain place the act of installing something. A ceremony in which someone is put in an official or important job. something (such as a piece of equipment) that is put together and made ready for use.

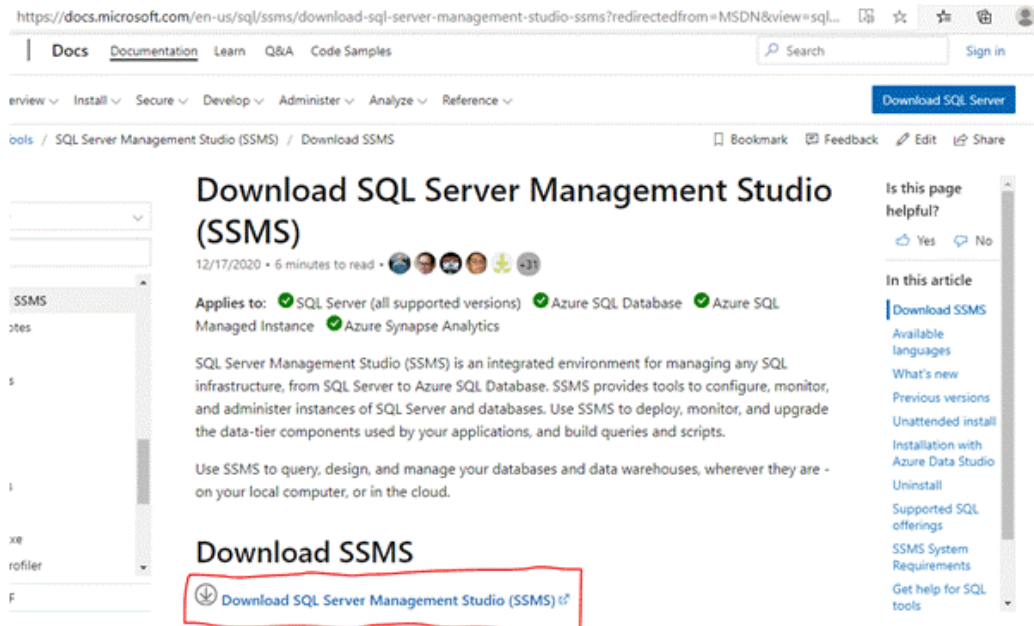
3.1.2.1 Installation Process for SSMS 2018

The latest version of SQL Server Management Studio (SSMS) is 18.8 released on December 17, 2020. The SQL Server Management Studio is software for querying, designing, and managing SQL Server on your local computer or in the cloud. It provides you with tools to configure, monitor, and administer SQL Server instances.

Step:1

To install SQL Server Management Studio 2019, you need to follow below steps

To install SQL Server Management Studio 2019, you need to download it from this [link](https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?redirectedfrom=MSDN&view=sql...).



https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?redirectedfrom=MSDN&view=sql...

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Download SQL Server Management Studio (SSMS)

12/17/2020 • 6 minutes to read • 431

Applies to: SQL Server (all supported versions) Azure SQL Database Azure SQL Managed Instance Azure Synapse Analytics

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database. SSMS provides tools to configure, monitor, and administer instances of SQL Server and databases. Use SSMS to deploy, monitor, and upgrade the data-tier components used by your applications, and build queries and scripts.

Use SSMS to query, design, and manage your databases and data warehouses, wherever they are - on your local computer, or in the cloud.


Download SSMS

Download SQL Server Management Studio (SSMS)

Is this page helpful? Yes No

In this article

- Download SSMS
- Available languages
- What's new
- Previous versions
- Unattended install
- Installation with Azure Data Studio
- Uninstall
- Supported SQL offerings
- SSMS System Requirements
- Get help for SQL tools

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

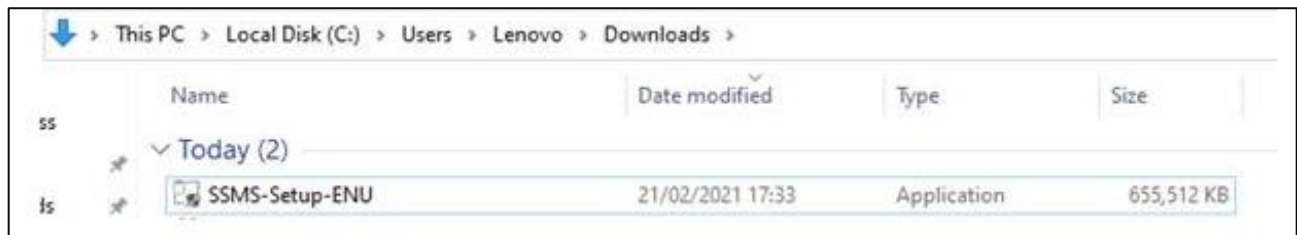
Step:2

Click the "Download" button for downloading the SSMS 2019 executable file on the downloaded path.




Step:3

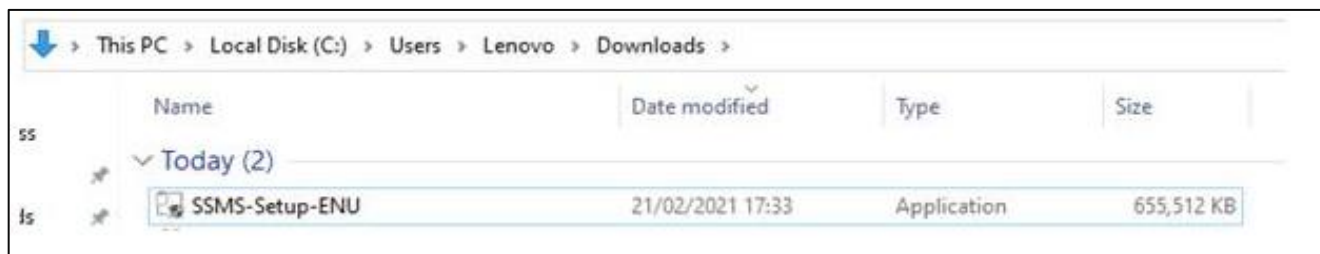
Open your system download path and find the .exe file. SSMS-Setup-ENU.exe



Step:4

Double-click the .exe file SSMS-Setup-ENU.exe to starting installing. The installation process of SMSS is straightforward which you just need to follow the screen sequence.

	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020



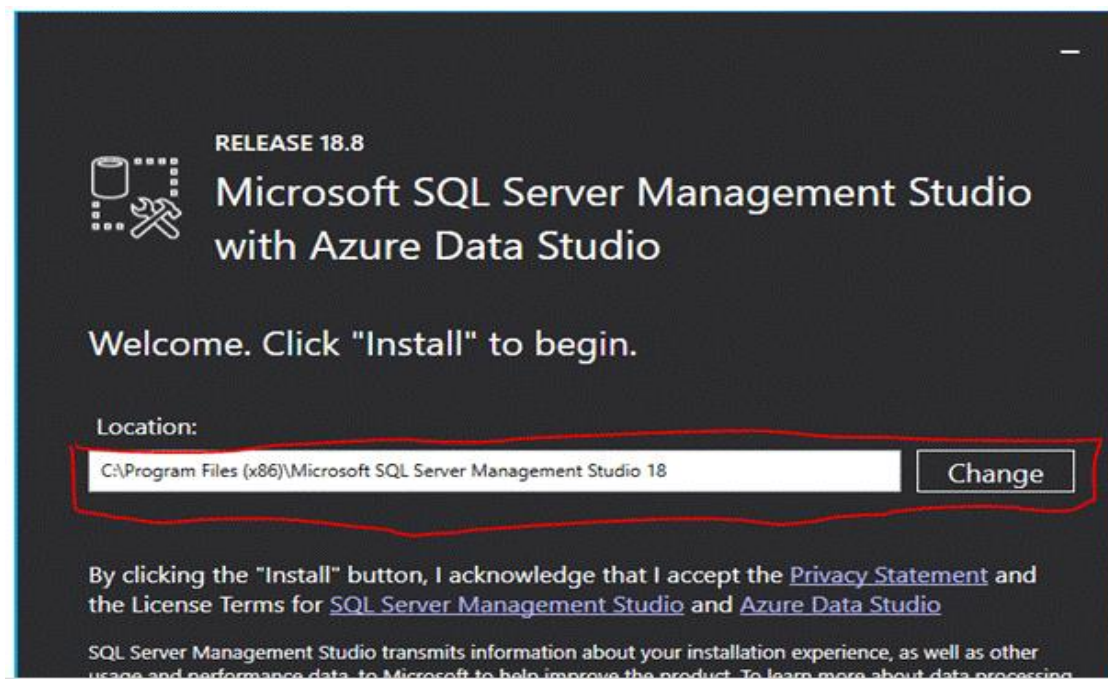
Step:5


After double-clicking, the system will ask the permission: “Do you want to allow the following to make a change to this computer? Click yes to continue installing the SQL Server Management Studio 2019, or...

Click “Yes” on any security prompt.

Step:6

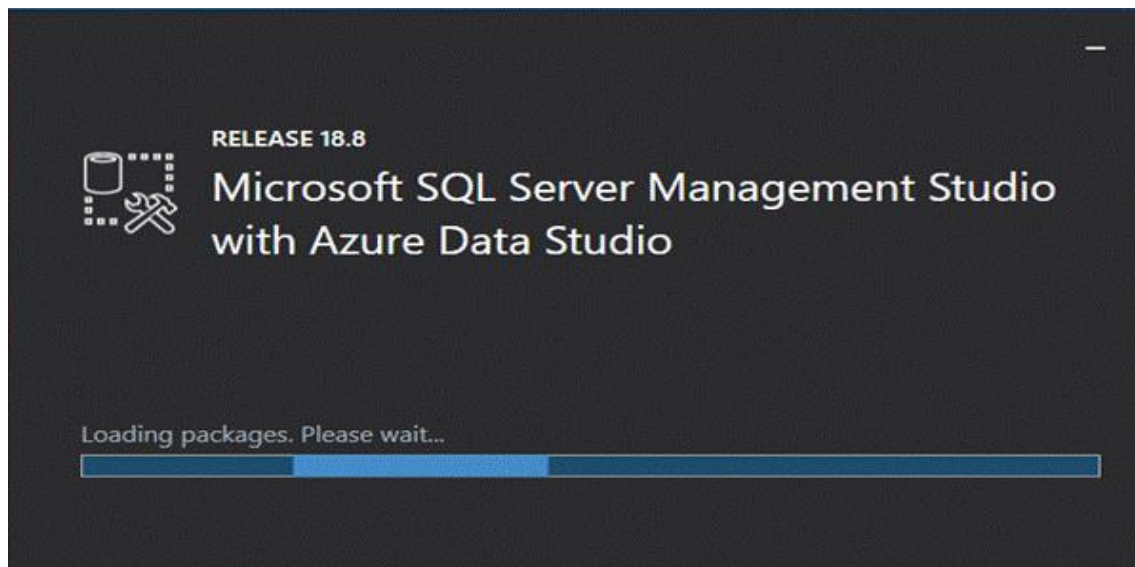
The installation window will be open after giving permission to install. Click the Install button.




	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

Step:7

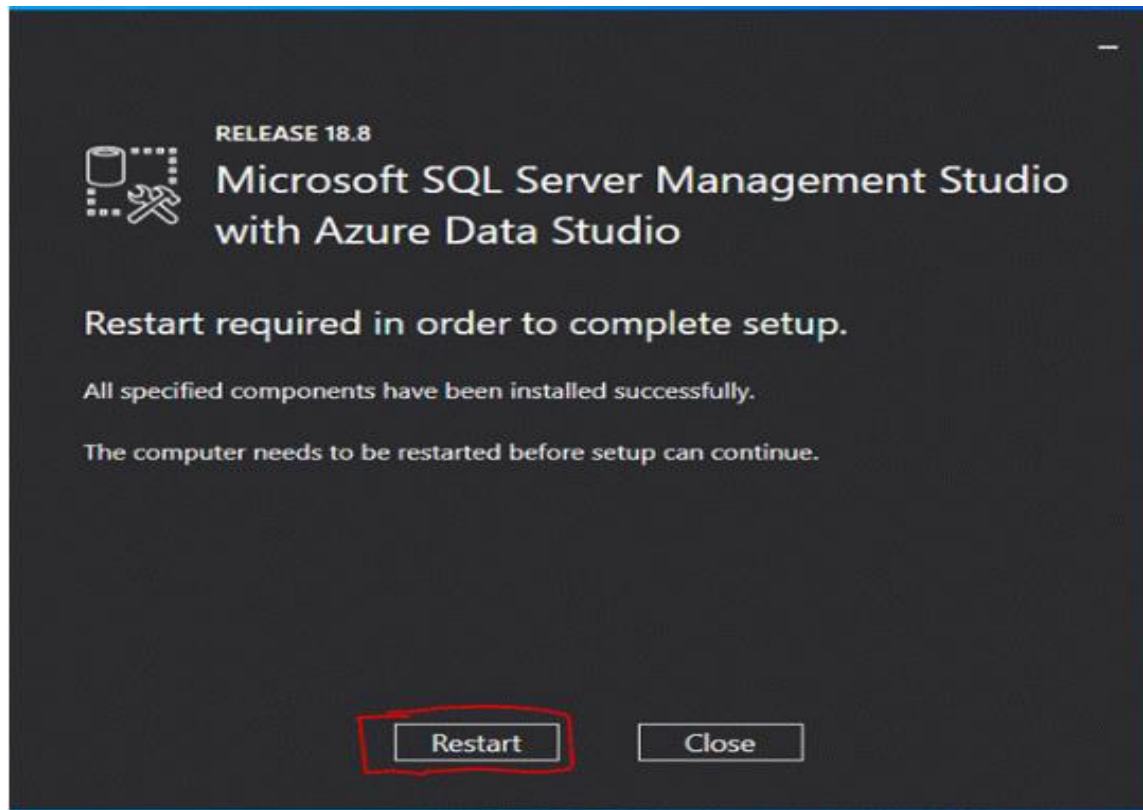
After loading packages progress bar will be shown. One is Package Progress and Overall Progress. Wait for few minutes while the installer sets up the software.



	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020


Step:8

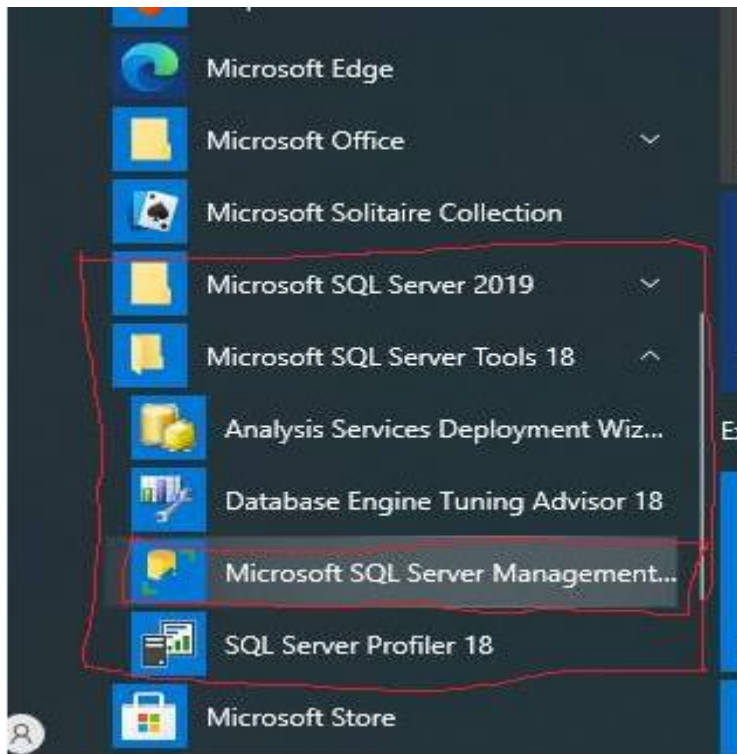
Installation completed. After completing the installation restart your computer for a complete setup.



Step:9

Go to all programs in your systems, we can see two folders one is Microsoft SQL Server 2019 and another one is Microsoft SQL Server Tool 2018. Under Microsoft SQL Server Tools 18 you can see the Microsoft SQL Server Management Studio 18.

	<p align="center">User Manuel OF ECSCADA –Web APPLICATION</p> <p align="center">Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>



Step:10

Double-click on SQL Server Management Studio 18 and it will open looks like the below screenshot. The first time opening it will take a few minutes.



User Manuel
OF ECSCADA –Web APPLICATION
Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD

Version No:

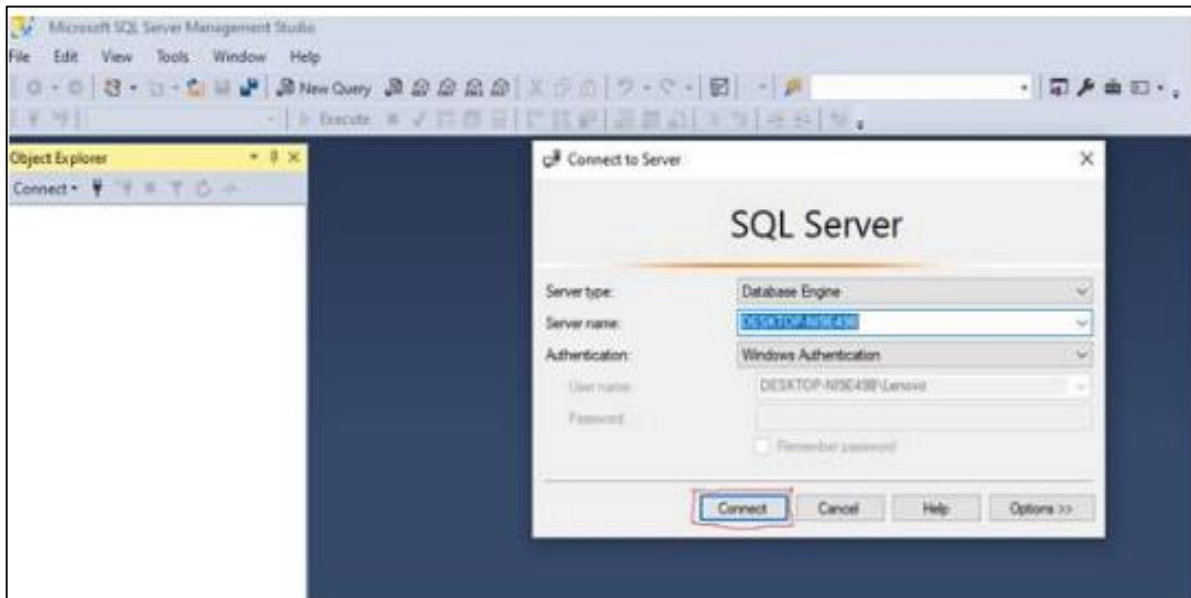
Draft


Date:

22/08/2020



After opening SQL Server Management Studio 2018, we can see that it looks like the below screenshot.



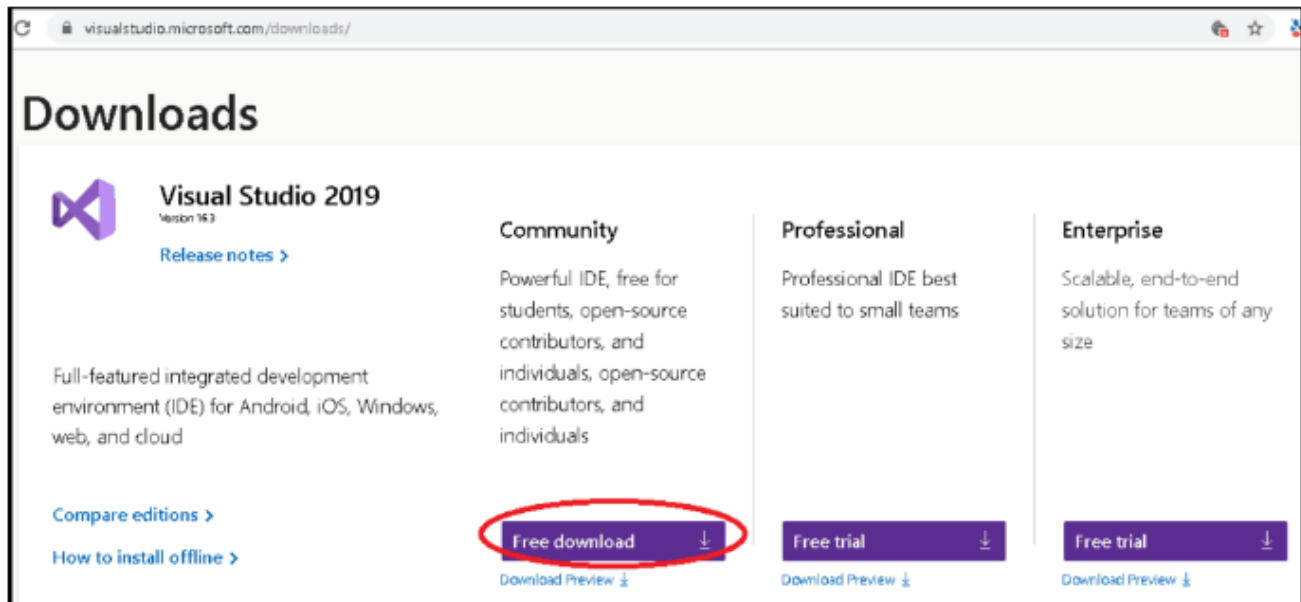
	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

3.1.2.2 Installation process for Visual studio 2019

The download and installation process is very simple

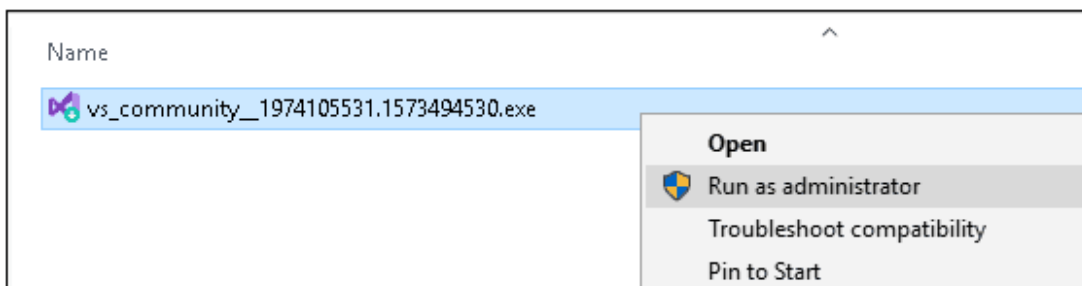
Step:1


Open Browser and search for visual studio 2019 and open like the below picture



Step:2

Right-click and select the Run as administrator on the downloaded file to begin the installation

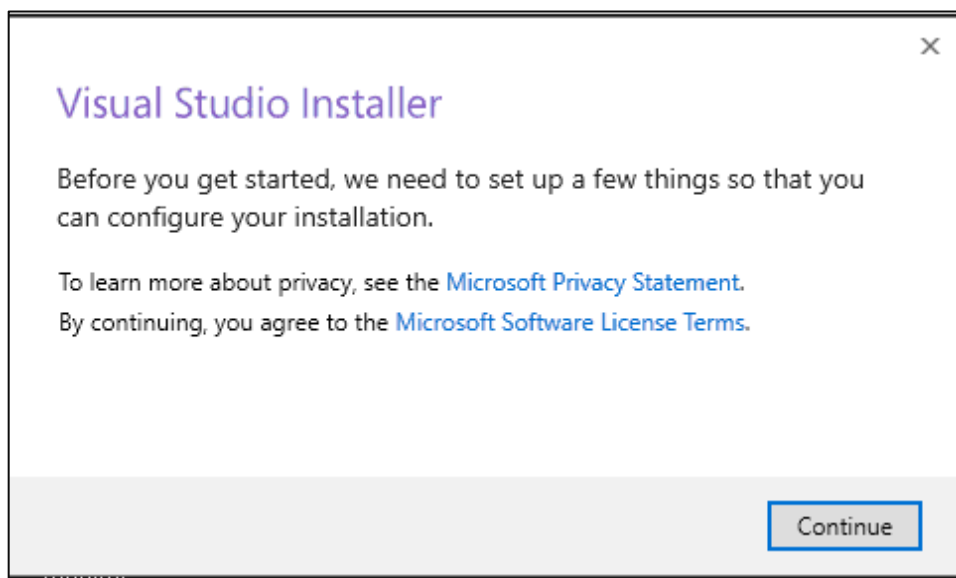


	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

You will be asked for permission to continue. Click on Yes to continue with the installation.

Step:3

Next, you will be asked to accept the software License terms and Privacy Statement. Click on continue to go ahead with the installation.



Step:4

The Installer fetches the required files to install the Visual Studio 2017. This process will take few minutes



User Manuel
OF ECSCADA –Web APPLICATION
Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD

Version No:
Draft

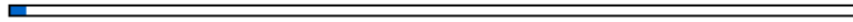
Date:
22/08/2020

Visual Studio Installer

Just a moment ... Fetching your files.

Downloading: 1.61 MB of 63.51 MB

414.3 KB/sec



Installing




Cancel

Visual Studio Installer

Products

Getting things ready ...



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		<p>Date: 22/08/2020</p>

Step:5

The Installer will ask for the features you wish to install. You have four options here

1. Workloads
2. Individual Components
3. Language Packs
4. Installation Location

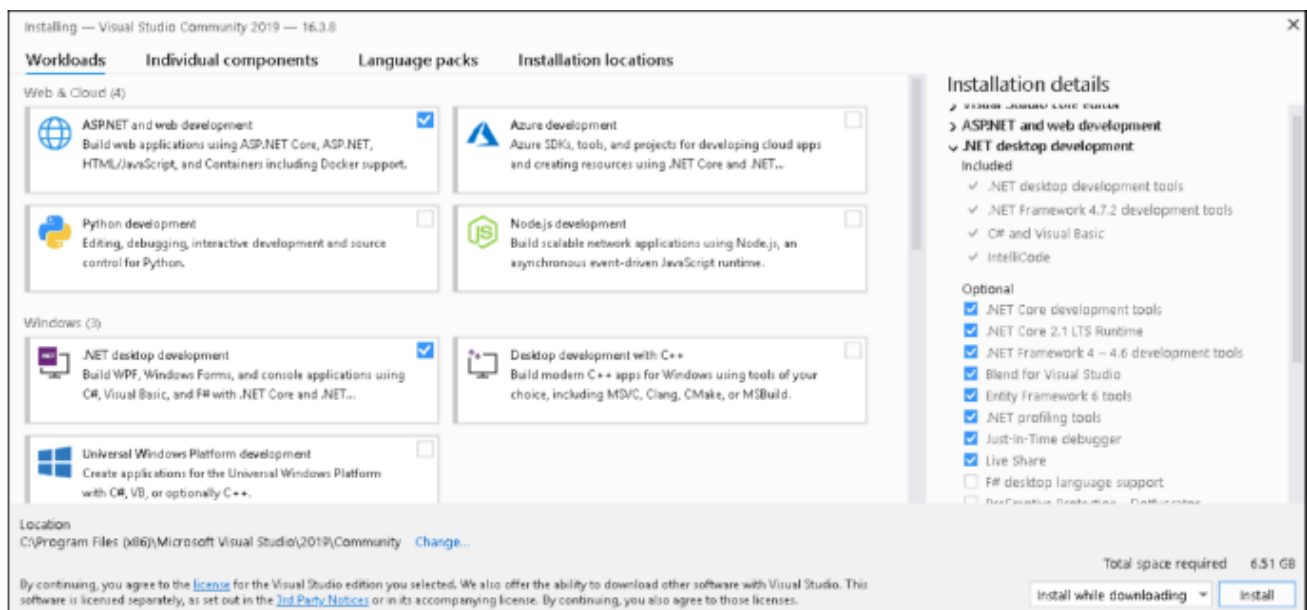
The first option is to select workloads.


A workload is a group of individual components based on the project type. For Example, if you are developing using ASP.NET for web development then you can choose **ASP.NET** and web development workload which will install the following components for you

1. C# and Visual Basic
2. .Net Framework 4.6
3. ASP.NET and web development tools
4. Entity Framework tools
5. Typescript SDK
6. IIS Express
7. NuGet Package Manager

Click here to see the complete [list of workloads in Visual Studio 2019](#)

Select the required Workload. I have chosen .NET Desktop development & ASP.NET and web development.



	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020


Step:6

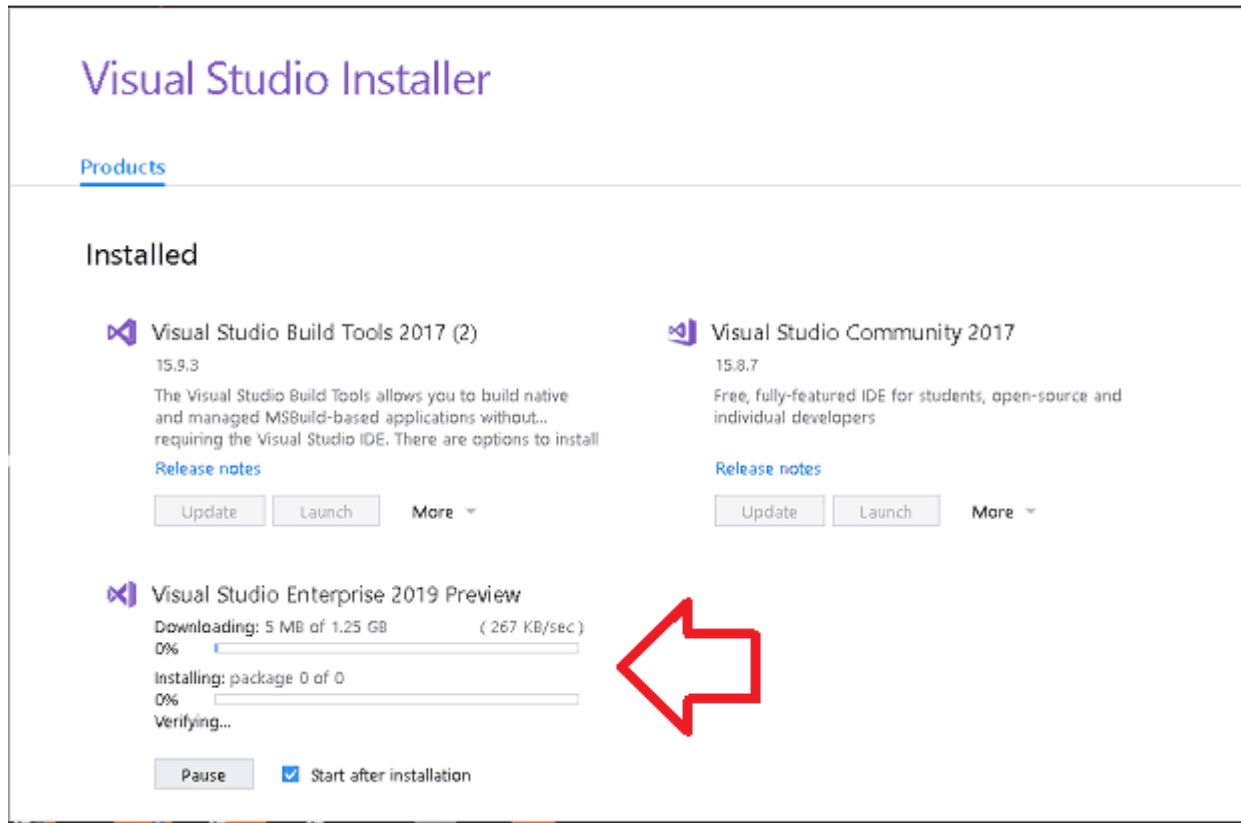
The Second Option gives an exhaustive list of components that you can install. Choosing the workloads automatically selects the components that are part of that workload. You can further customize what you want to install from this option.

Select the required components



Now, click on the Install button to begin the installation of Visual Studio 2019.


	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>



The installer will now download each component from the internet and starts the installation. This will take a while depending on your internet speed.

Once the installation is complete, you will be presented with the **Installation succeeded** message along with the option to register

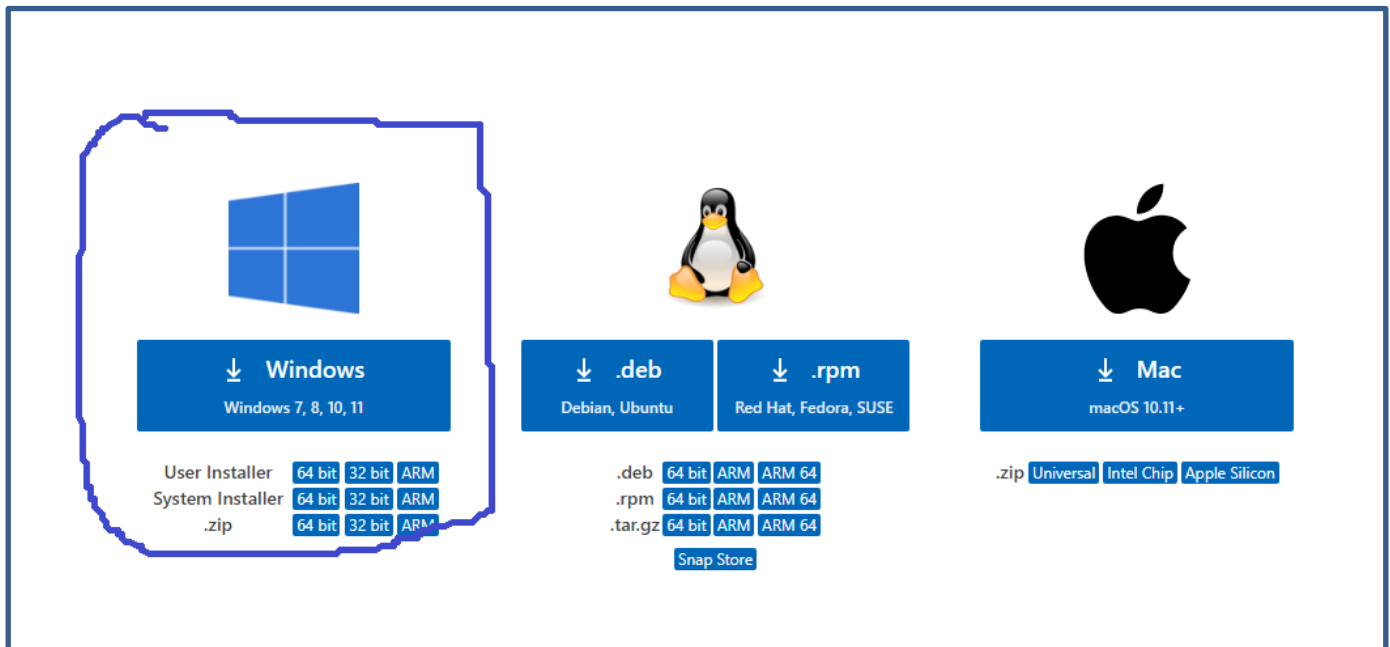
If you are installing Visual Studio for the first time you will be asked to sign in

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

3.1.2.3 Installation for visual studio Code 2019


Step:1

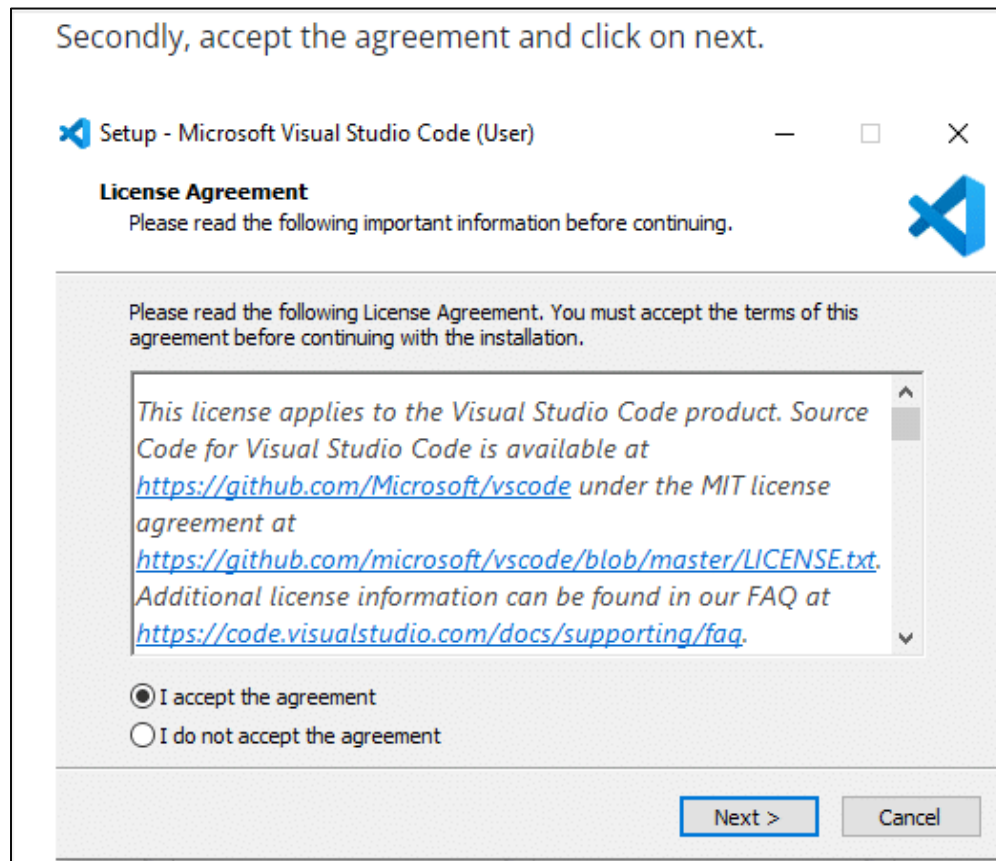
First we have to open browser then search for install visual studio code 2019 then below Window will be opened. Then click on Download.




Step:2

Firstly, download the Visual Studio Code installer for Windows. Once it is downloaded, run the installer (*VSCodeUserSetup-{version}.exe*). It will only take a minute. Secondly, accept the agreement and click on next.

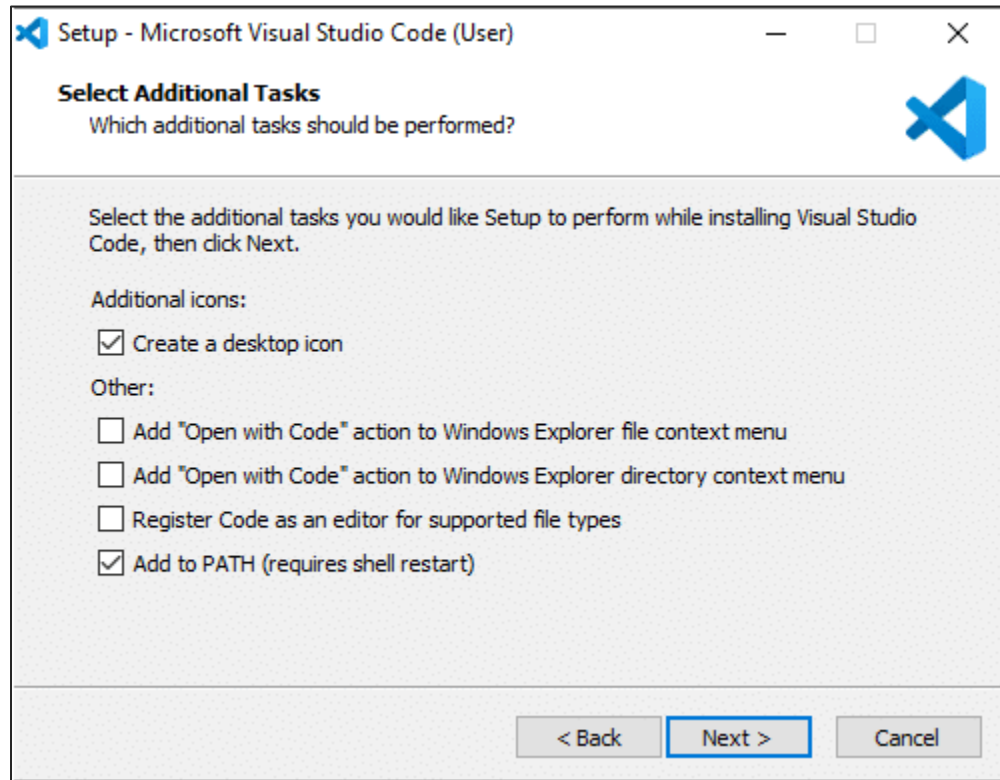
	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>



Thirdly, click on *"create a desktop icon"* so that it can be accessed from desktop and click On Next.


 <p>SPT EC ELECTRONICS CORPORATION OF INDIAN LIMITED A Govt. Of India (Dept. of Atomic Energy) Enterprise</p>	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>

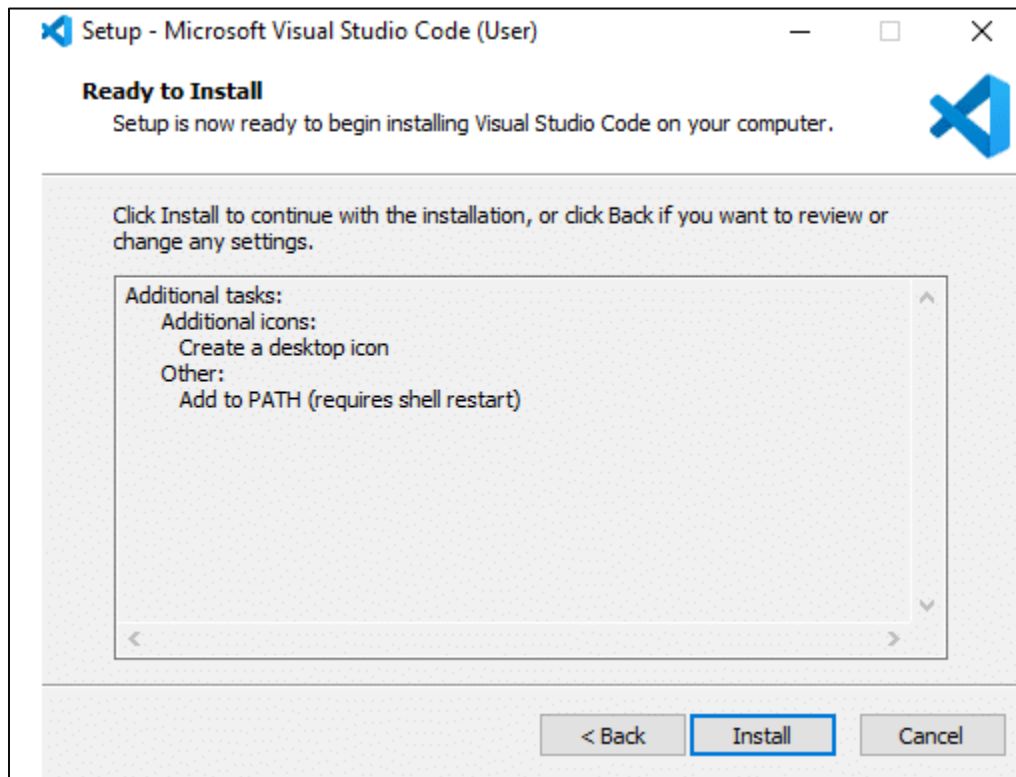
Step:3



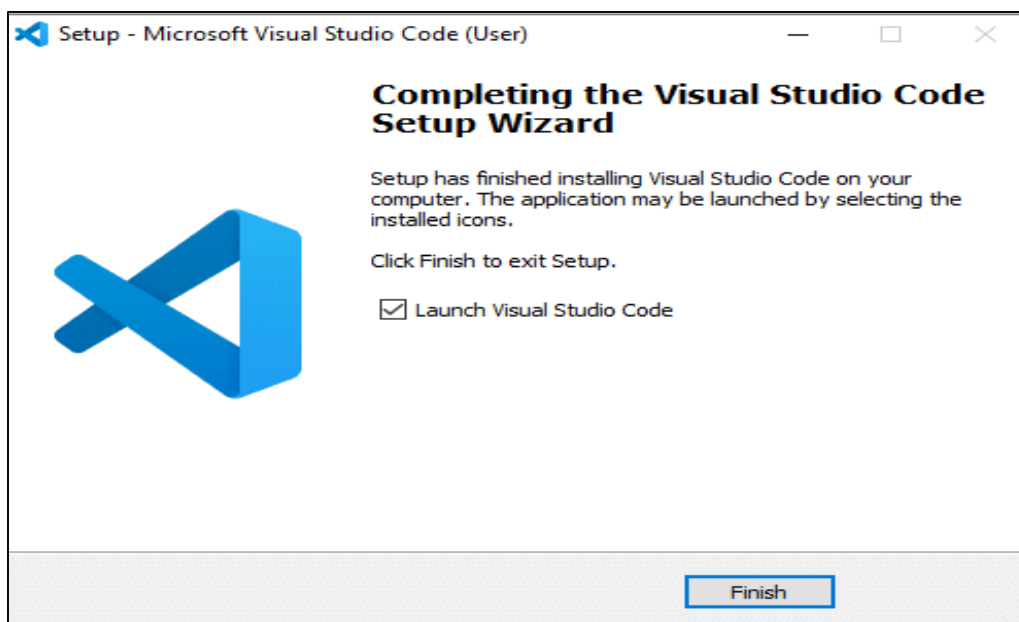
After that, click on the install button.

Step:4

 <p>SPT EC ELECTRONICS CORPORATION OF INDIAN LIMITED A Govt. Of India (Dept. of Atomic Energy) Enterprise</p>	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>



Finally, after installation completes, click on the finish button, and the visual studio code will get open.





User Manuel
OF ECSCADA –Web APPLICATION
Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD

Version No:


Draft

Date:

22/08/2020

3.1.2.3 Installation Process for React Packages

S. No	Package Name	Package Installation Command
1	axios	npm install axios
2	testing-library	npm install testing-library
3	concurrently	npm install concurrently
4	cors	npm install cors
5	express	npm install express
6	fast-xml-parser	npm install fast-xml-parser
7	formik	npm install formik
8	js-base64	npm install js-base64
9	konva	npm install konva
10	list-react-files	npm install list-react-files
11	moment	npm install moment
12	multer	npm install multer
13	nodemon	npm install nodemon
14	npm	npm install npm
15	react	npm install react
16	react-autocomplete-hint	npm install react-autocomplete-hint
17	react-bootstrap	npm install react-bootstrap
18	react-csv	npm install react-csv
19	react-csv-downloader	npm install react-csv-downloader
20	react-datepicker	npm install react-datepicker
21	react-dom	npm install react-dom
22	react-form-with-constraints	npm install react-form-with-constraints
23	react-icons	npm install react-icons
24	react-konva	npm install react-konva
25	react-paginate	npm install paginate
26	react-pro-sidebar	npm install react-pro-sidebar
27	react-redux	npm install react-redux
28	react-router-dom	npm install react-router-dom
29	react-scripts	npm install react-scripts
30	react-select	npm install react-select
31	react-toastify	npm install react-toastify
32	react-xml-parser	npm install react-xml-parser
33	reactstrap	npm install reactstrap
34	redux	npm install redux
35	redux-persist	npm install redux-persist
36	utils	npm install utils
37	web-vitals	npm install web-vitals

	User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD	Version No: Draft Date: 22/08/2020
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3.2 Client

Server application is provided as an executable. It should be run in a system where data is monitored through web application. This application acts as a source of data for all the available clients. A server is a computer program or device that provides a service to another computer program and its user, also known as the client. ... A given application in a computer might function as a client with requests for services from other programs and as a server of requests from other programs.

3.2.1 Software Requirements

S. No	Description	Installation Software
1	UI Development	Visual studio 2019 & Visual studio Code2019
2	APIs Development	Visual studio 2019
3	Database –	SSMS 2018

3.2.2 Installation Procedure

The act or process of making a machine, a service, etc., ready to be used in a certain place the act of installing something. A ceremony in which someone is put in an official or important job. something (such as a piece of equipment) that is put together and made ready for use.

3.2.2.1 Installation Process for SSMS 2018

Refer Section 3.1.2.1

3.2.2.2 Installation process for Visual studio 2019

Refer Section 3.1.2.2

3.2.2.3 Installation for visual studio Code 2019

Refer Section 3.1.2.3

3.2.2.4 Installation Process for React Packages

S. No	Package Name	Package Installation Command
1	apexcharts	npm install apexcharts
2	fortawesome	npm install fortawesome
3	@testing-library/jest-dom	npm install @testing-library/jest-dom
4	@uiw/react-color-github	npm install @uiw/react-color-github



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Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD

Version No:

Draft

Date:

22/08/2020

5	@uiw/react-color-sketch	npm install @uiw/react-color-sketch
6	axios	npm install axios
7	bootstrap	npm install bootstrap
8	canvas	npm install canvas
9	canvasjs	npm install canvasjs
10	canvasjs-react-charts	npm install canvasjs-react-charts
11	chart.js	npm install chart.js
12	chartjs-plugin-zoom	npm install chartjs-plugin-zoom
13	fast-xml-parser	npm install fast-xml-parser
14	highcharts	npm install highcharts
15	highcharts-react-official	npm install highcharts-react-official
16	js-base64	npm install js-base64
17	konva	npm install konva
18	list-react-files	npm install list-react-files
19	moment	npm install moment
20	mxgraph	npm install mxgraph
21	react	npm install react
22	react-advanced-datetimerange-picker	npm install react-advanced-datetimerange-picker
24	react-apexcharts	npm install react-apexcharts
25	react-blink-text	npm install react-blink-text
26	react-bootstrap	npm install react-bootstrap
27	react-chartjs-2	npm install react-chartjs-2
28	react-color	npm install react-color
29	react-confirm-alert	npm install react-confirm-alert
30	react-csv	npm install react-csv
31	react-csv-downloader	npm install react-csv-downloader
32	react-datepicker	npm install react-datepicker
33	react-dates	npm install react-dates
34	react-datetime	npm install react-datetime
35	react-datetime-picker	npm install react-datetime-picker
36	react-datetime-range-picker	npm install react-datetime-range-picker
37	react-day-picker	npm install react-day-picker
38	react-dom	npm install react-dom
39	react-google-charts	npm install react-google-charts
40	react-hammerjs	npm install react-hammerjs
41	react-konva	npm install react-konva
42	react-line-graph	npm install react-line-graph
43	react-mxgraph	npm install react-mxgraph
44	react-native	npm install react-native
45	react-native-web	npm install react-native-web
46	react-paginate	npm install react-paginate
47	react-redux	npm install react-redux
48	react-router-dom	npm install react-router-dom
49	react-scripts	npm install react-scripts
50	react-scroll	npm install react-scroll
51	react-select	npm install react-select




User Manuel
OF ECSCADA –Web APPLICATION
Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD

Version No:
Draft

Date:
22/08/2020

51	react-simple-maps	npm install react-simple-maps
53	react-toastify	npm install react-toastify
54	react-typist	npm install react-typist
55	react-widgets	npm install react-widgets
56	react-xml-parser	npm install react-xml-parser
57	reactjs-popup	npm install reactjs-popup
58	redux	npm install redux
59	redux-persist	npm install redux-persist

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

4. Configurations

4.1 APIs Configuration

API paths are globally configured in utility.jsx.so we can configured from utility.jsx.

4.2 XML File Configuration

Make sure xml files path properly configured in Uncacanvas.jsx.

4.3 Reports Configuration

Make sure report files path properly configured in Report_shift.js and Report_daily.js

4.4 Batch Jobs Configuration

4.4.1 Ssis package process

Step 1: Create a simple package, one OLEDB source and Flat file destination.

Step 2: Go to the Flat File connection properties.

Step 3: Go to the expression property for the same.

Step 4: Select the property as connection string and when you open the expression type the below code as it is:

For example: let's say my package name is: "ImportDatatoFlatFile"

```
"E:\\unical\\DynamicFlatFiles"+@ [System::Package Name] +""+REPLACE ((DT_STR, 30, 1252)
GETDATE (),":","")
```

```
"E:\\A-Learnings\\Miscellaneous\\TextFiles\\"+@ [System::Package Name] +""+REPLACE
((DT_STR, 30, 1252) GETDATE (),":","")
```

For the first time, we need to browse the connection to a flat file, to retrieve the input columns and Their properties, but after the connection manager property change, it's not required.

4.4.2 Creating sql job

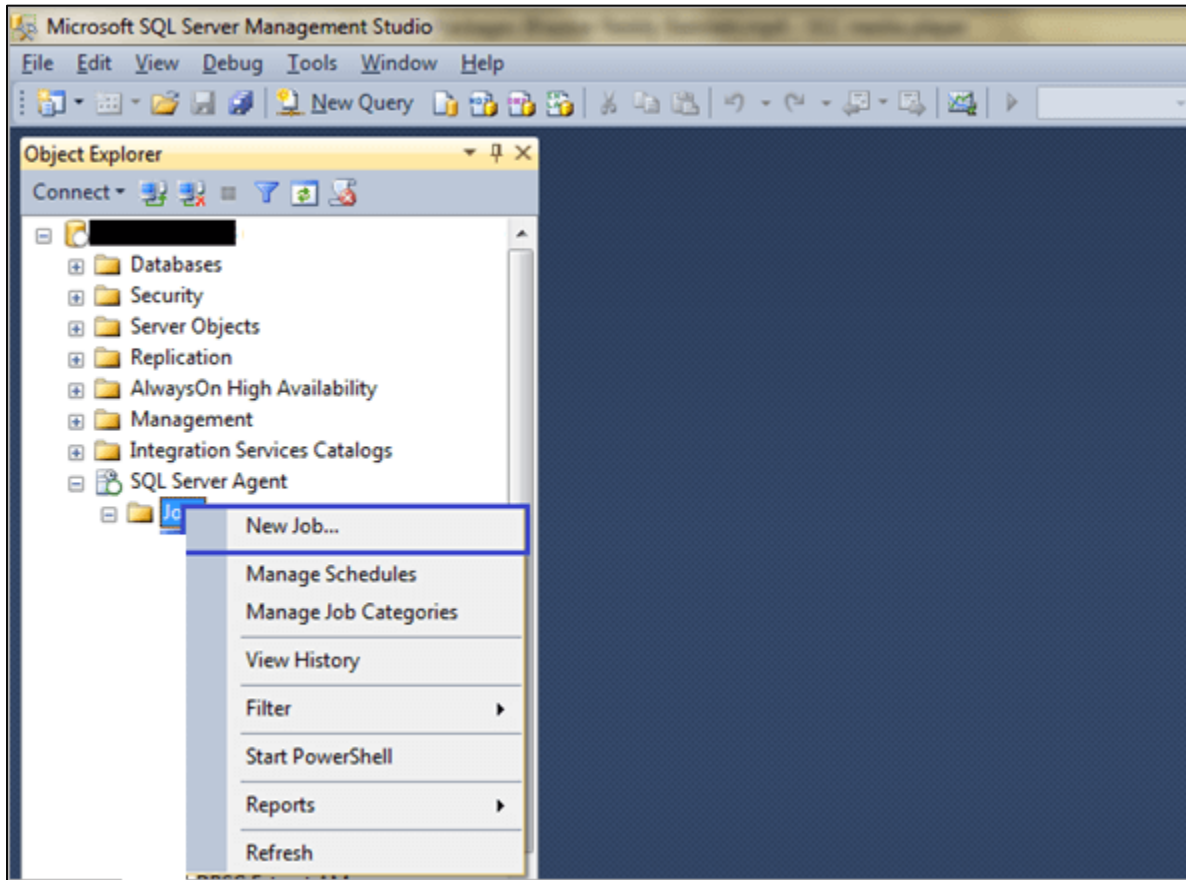
Step: 1

Follow the below steps to create a new job.

- Open the SQL Server Management Studio on Windows and you should have the “*SQL Server Agent*” to implement the automated jobs.
- Expand the “*SQL Server Agent*” in Object Explorer.

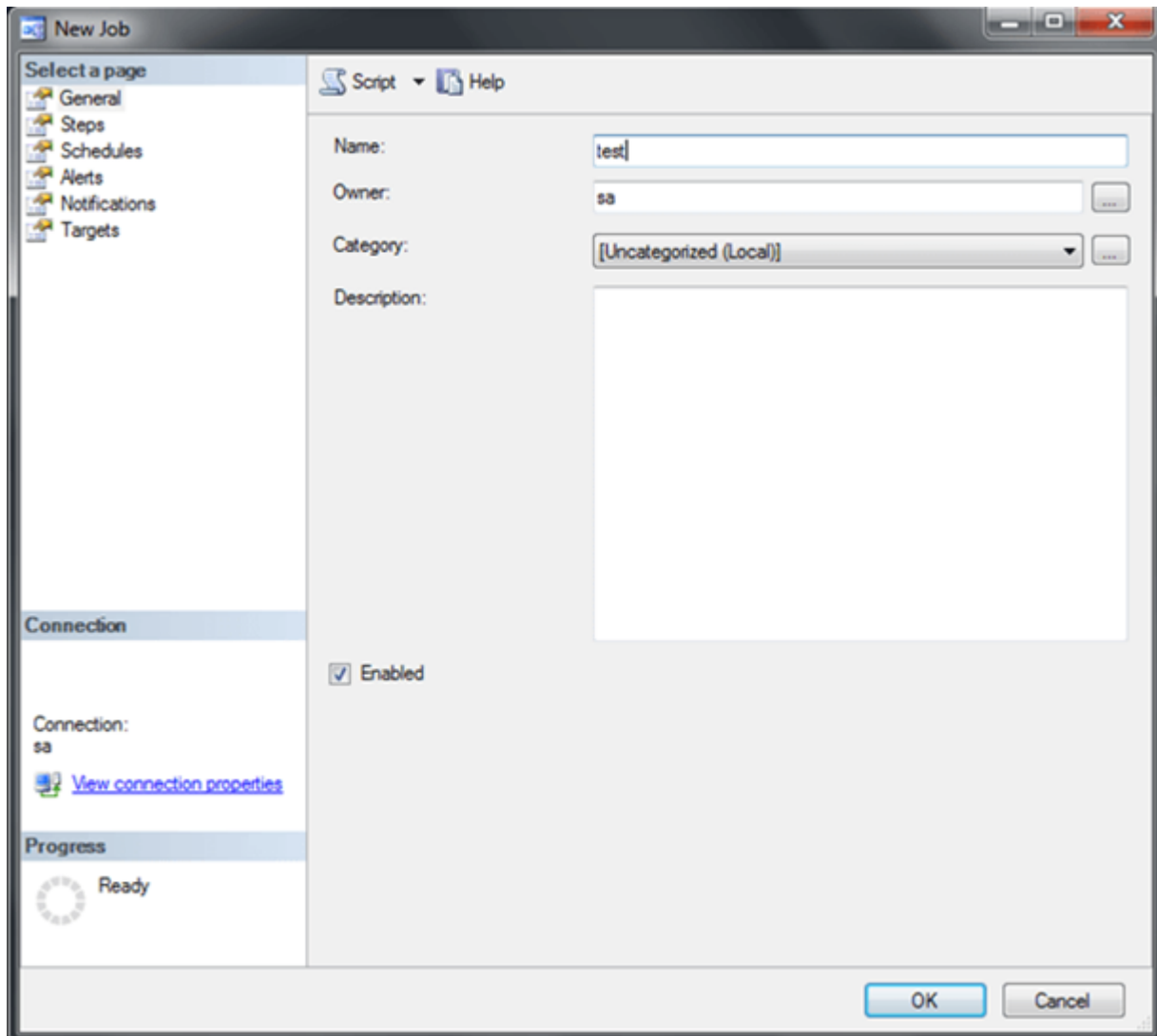
- Right click on the Jobs and select the “New Job...”

You can see the “New Job” window



Step: 2

Here, you should give a valid name for the new job. And then click on “OK” button.




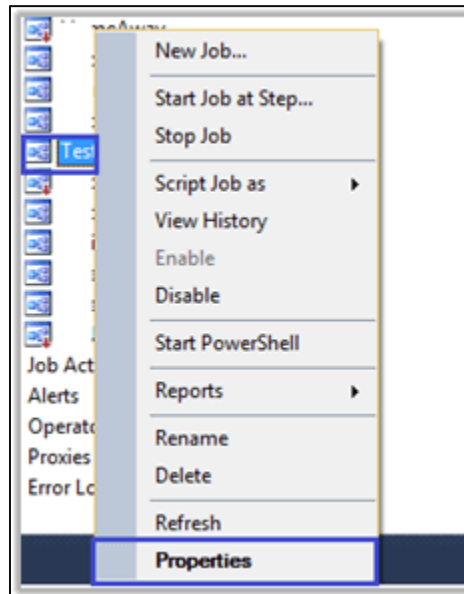
Finally, you can see that the job has been created on the “*SQL Server Agent*” list.

Once this is done, right click on the SQL Agent and refresh it.

Find the below screenshot for your reference (The job has been created).

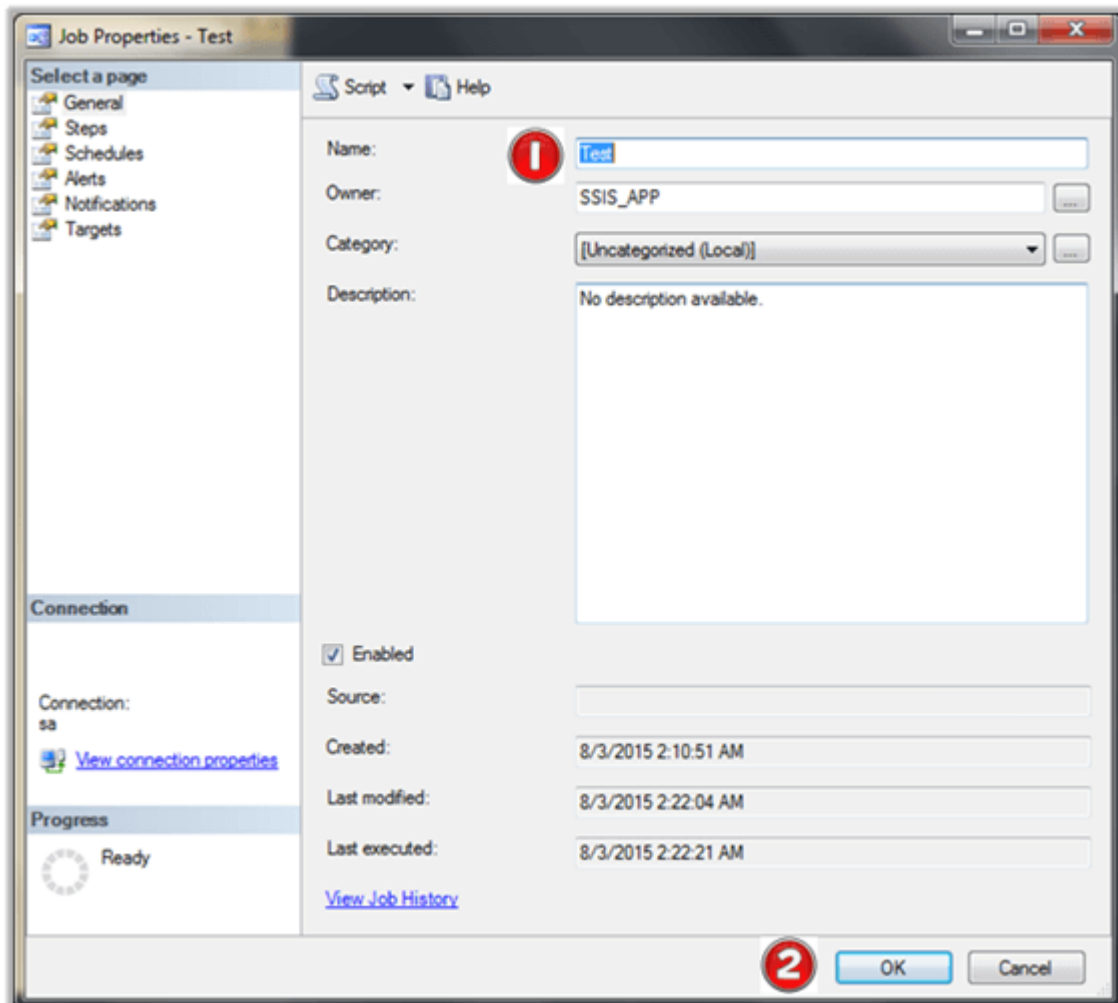
Then click on “*Property*” option to set the job configurations.

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		<p>Date: 22/08/2020</p>



Step: 3 General Page

In the general page, you should give a name for Scheduling the job and then click on “OK”.

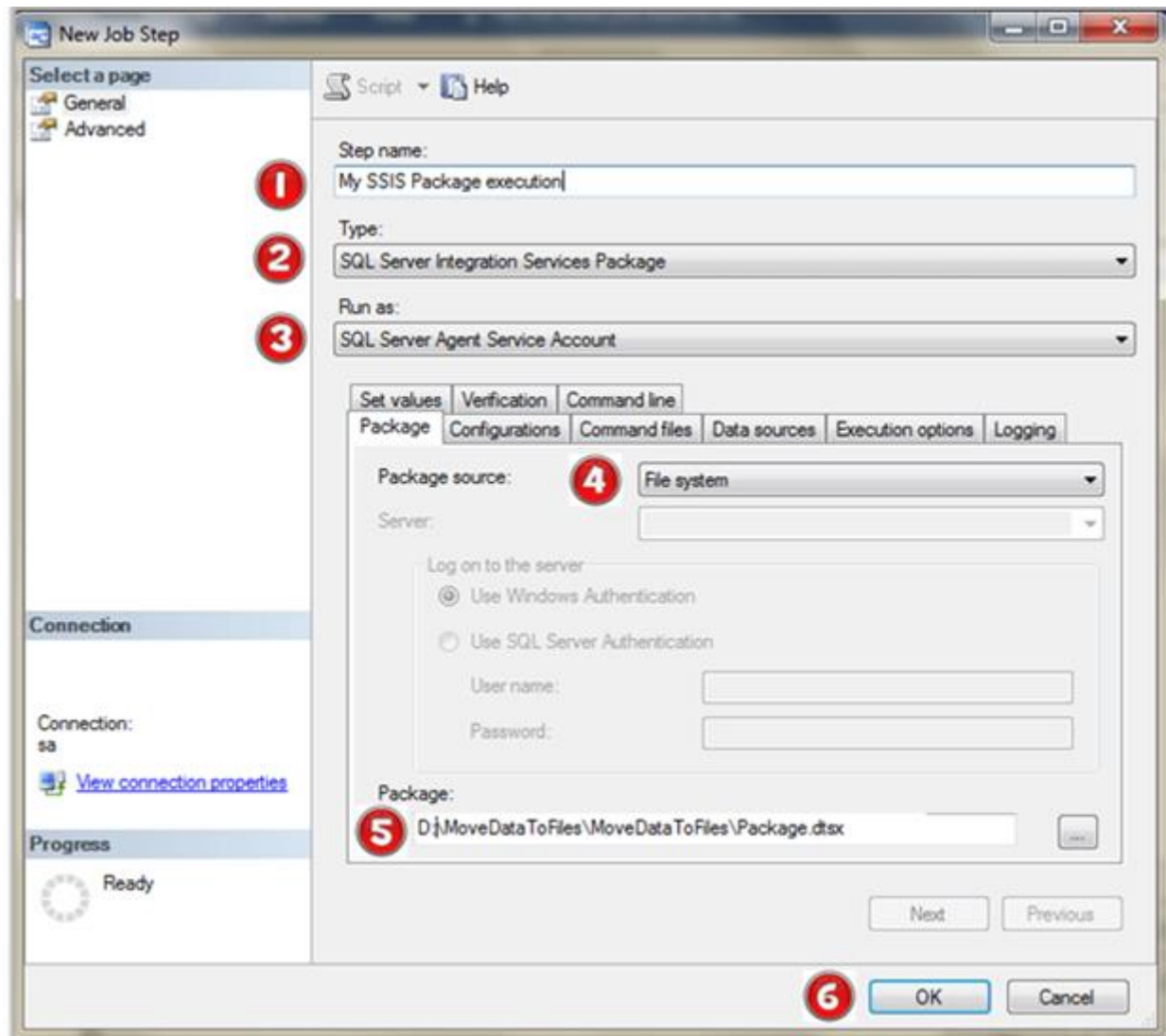


Step: 4

Then select the “Steps” option from the menu list.

You will see the below screen. Follow the below steps for the JOB configurations.

1. Enter the step name
2. The Type should be “SQL Server Integration Services Package”
3. The Run as mode should be “SQL Server Agent Service Account”
4. And change Package Source from SSIS Package to File System.
5. Then select the your SSIS package file, where you have stored locally in your machine/server
6. Then click on “OK”.

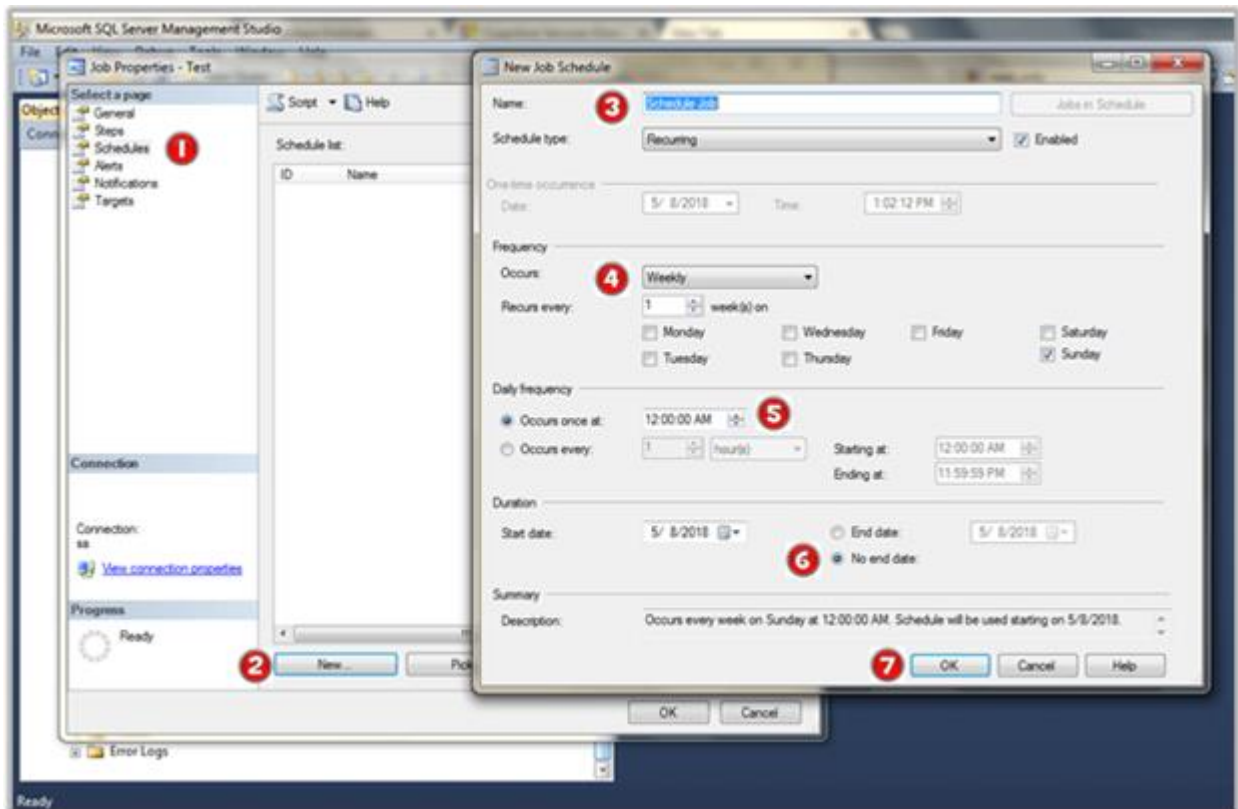


Step: 5 - Schedule Page

Follow the steps to schedule the JOB timing.

1. Click on “Schedule” option from the menu
2. You can see that “New” button in bottom of the window. Click on it.
3. Enter the name to “Schedule a JOB”
4. Mention the timing that, when the JOB wants to execute Daily, Weekly, Monthly or Yearly.
5. Set the timing to execute your operation AM/PM

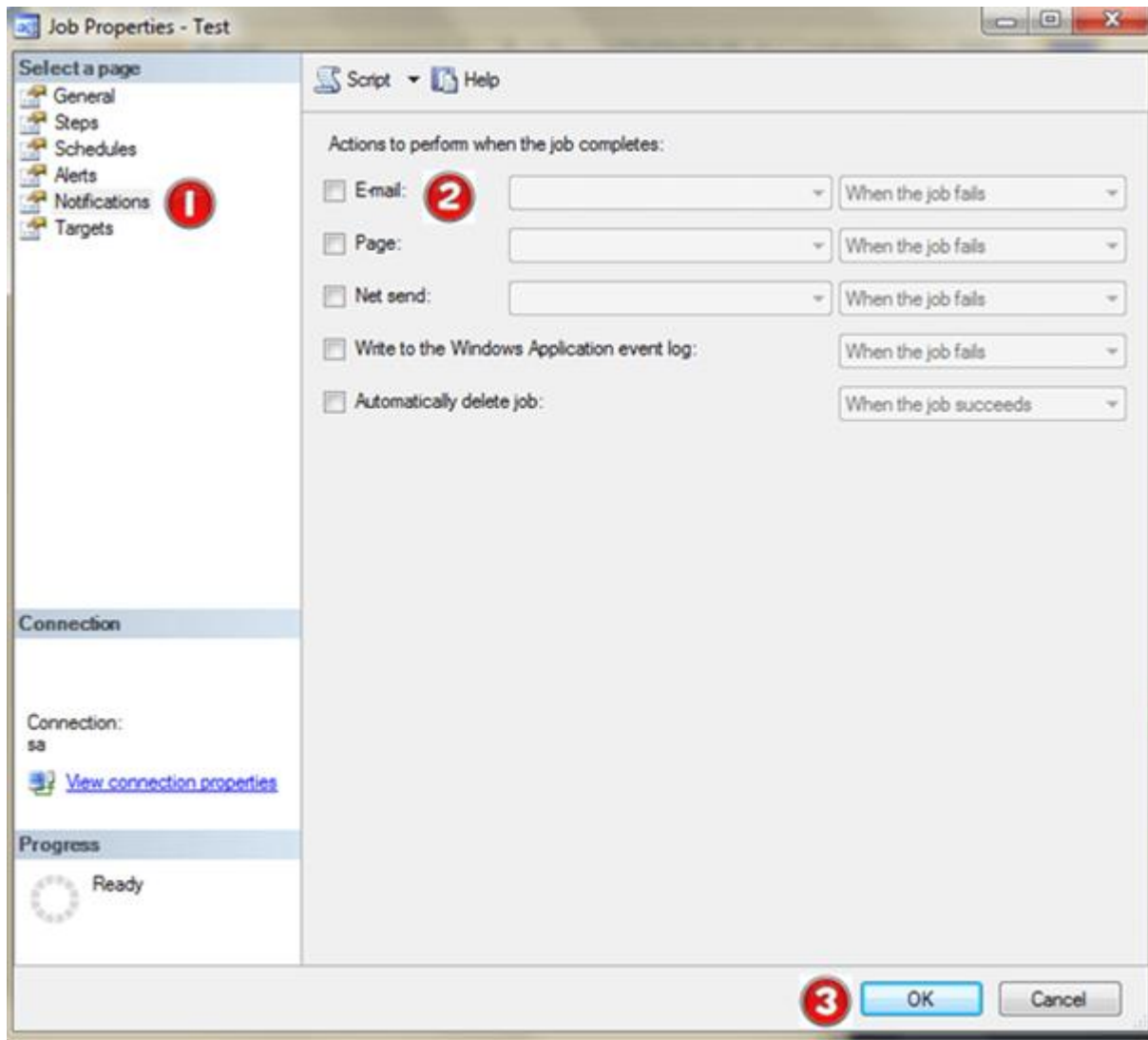
6. If you want to continue your JOB till end, set “*No end date*” else set how long the JOB wants to execute.
7. Click on “*OK*”



Now, the created schedule will be displayed on the schedules list.

Step: 6

It will send you the email notification alert, when the JOB succeeds or fails.

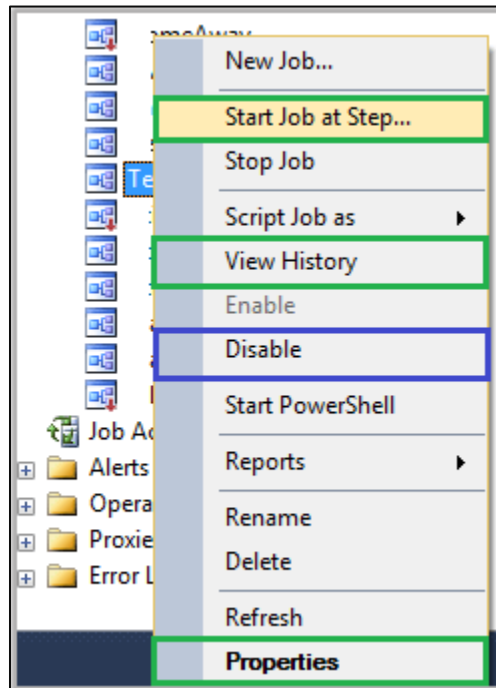


Click on the e-mail option and select the JOB mode. Then click on “OK”.

Step: 7

These are the properties to Start/Stop/View/Disable a JOB.

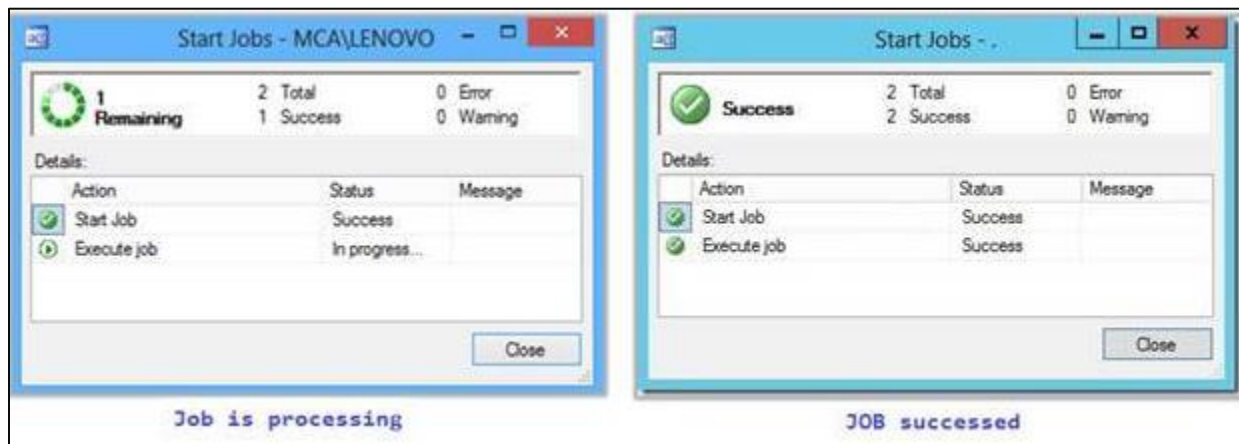
- Start Job at Step - It will execute your JOB
- Stop Job - The Job execution process will be stopped
- View History - You can see the successes/failure history of a JOB
- Enable - To enable the JOB for package execution
- Disable - It will stop the JOB execution.
- Properties - You can do the configuration for the JOB




Right click on the Job name and click the “Start Job at Step”.

The JOB will be starting to execute.

Something like the below screenshot where you can see the updates.



Once this is complete, you can see the changes as per your SSIS logic.

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

5. Application Build Process

The term build may refer to the process by which source code is converted into a stand-alone form that can be run on a computer or to the form itself. One of the most important steps of a software build is the compilation process, where source code files are converted into executable code.

5.1 Web server Build Process

In order to build the application we need to run the following command **npm run build**. This creates a build directory inside the root directory, which bundles your React app and minifies it into simple HTML, CSS, and JavaScript files. This build folder serves your app via a simple entry point, index.html, where your entire React app resides. Running your app via a remote server means running this index.html file on the server.

5.2 Web Client Build Process

In order to build the application we need to run the following command **npm run build**. This creates a build directory inside the root directory, which bundles your React app and minifies it into simple HTML, CSS, and JavaScript files. This build folder serves your app via a simple entry point, index.html, where your entire React app resides. Running your app via a remote server means running this index.html file on the server.

5.3 Web APIs Build Process

Step 1:

Start Visual Studio.

Step 2:


1. Open the project that you created in Create a .NET API application using Visual Studio.

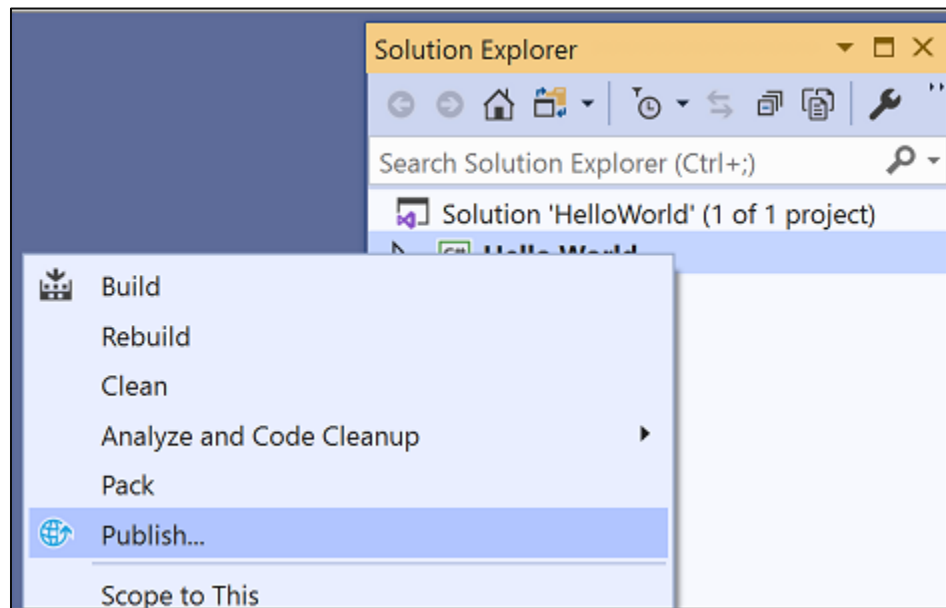
Step 3:

Make sure that Visual Studio is using the Release build configuration. If necessary, change the build configuration setting on the toolbar from **Debug** to **Release**.

Step 4:

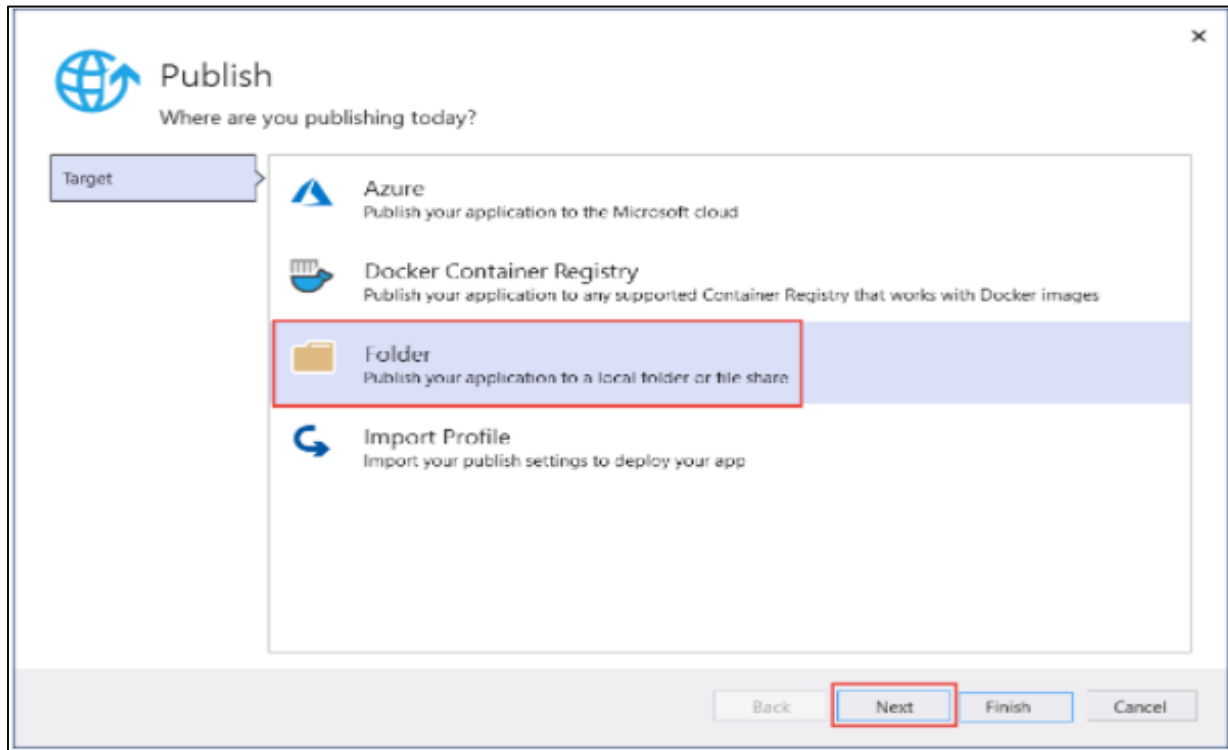
Right-click on the project (not the solution) and select **Publish** from the menu.

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		<p>Date: 22/08/2020</p>




Step 5:

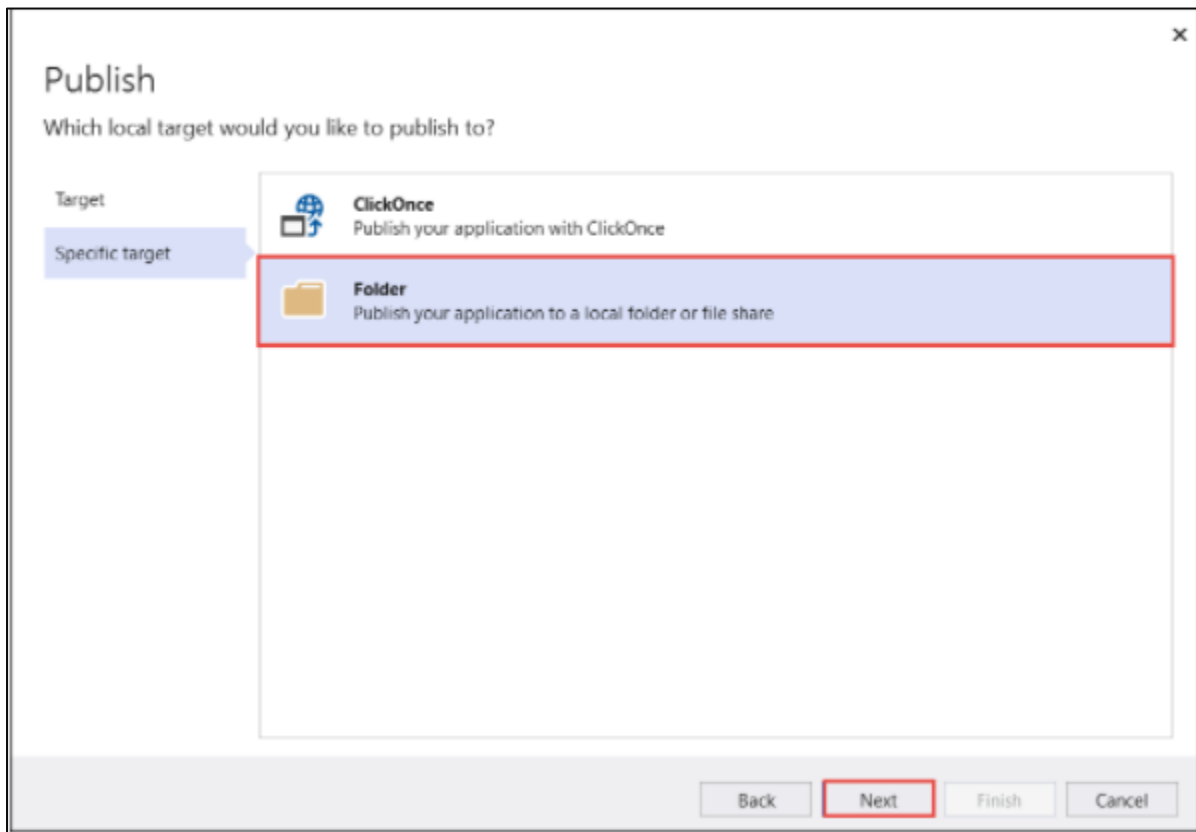
On the **Target** tab of the **Publish** page, select **Folder**, and then select **next**.



Step 6:


On the **Specific Target** tab of the **Publish** page, select **Folder**, and then select **next**.

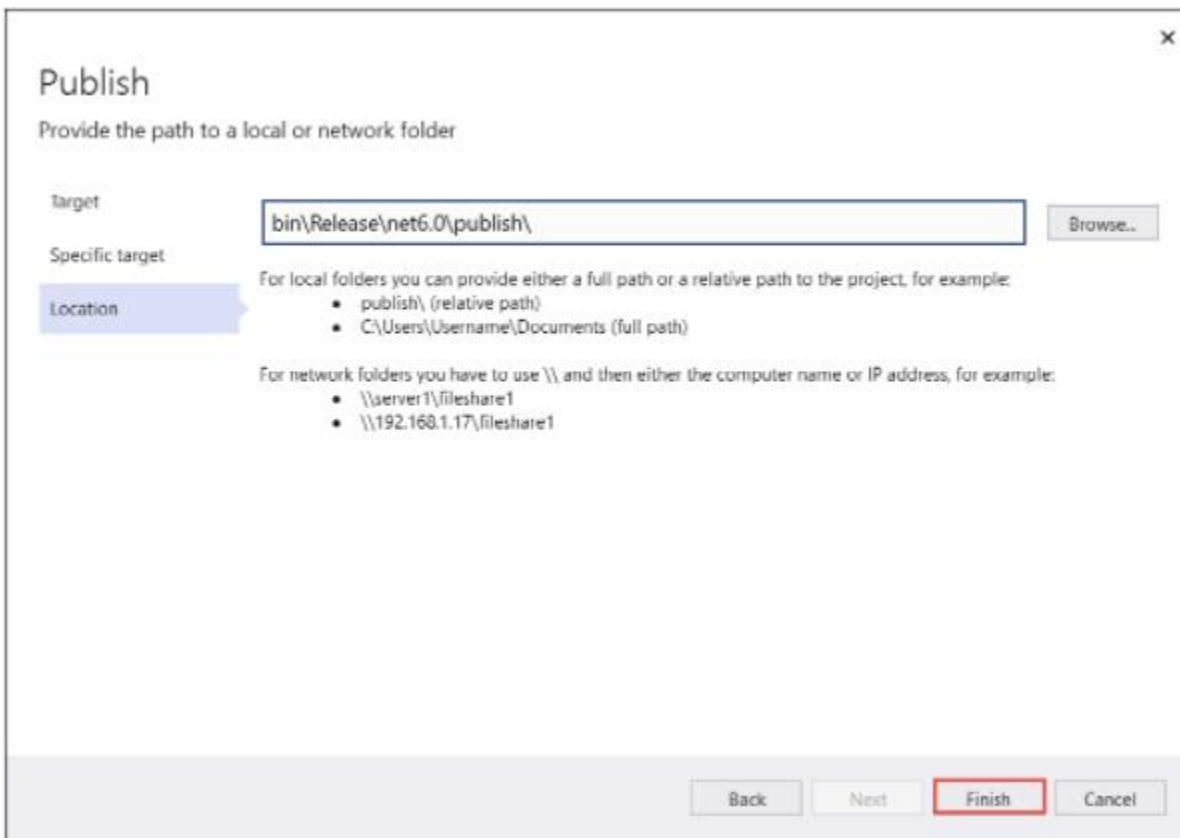
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		<p>Date: 22/08/2020</p>



Step 7:


On the **Location** tab of the **Publish** page, select **Finish**.

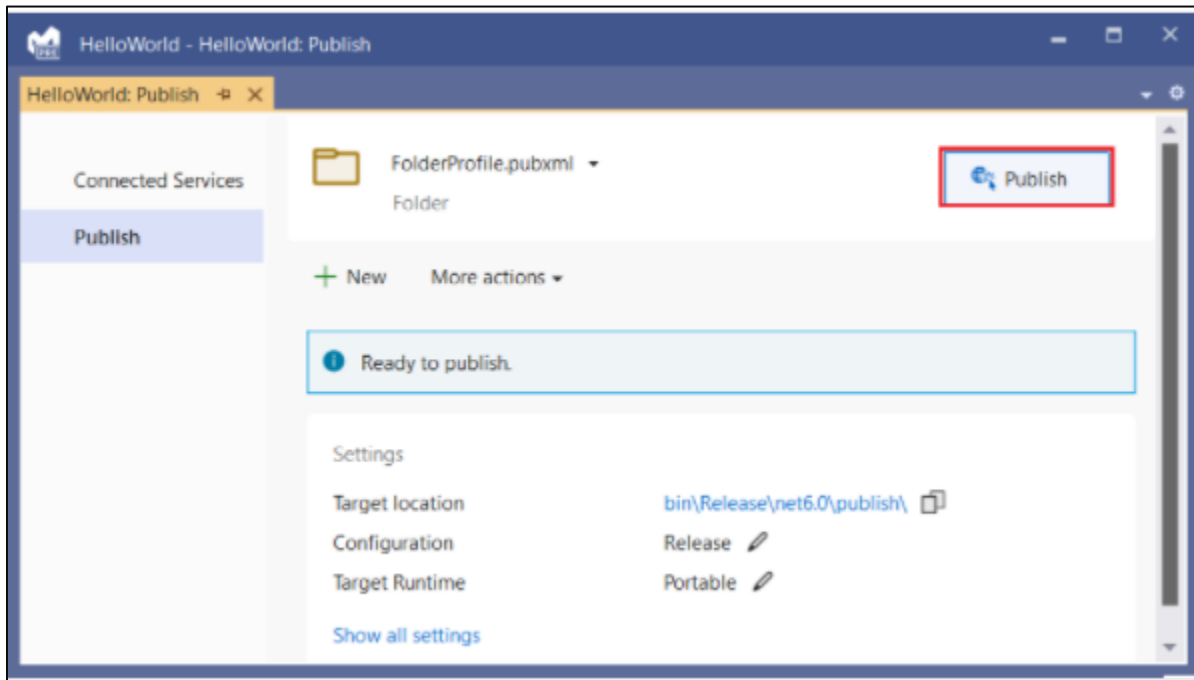
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		Date: 22/08/2020



Step 8:


On the **Publish** tab of the **Publish** window, select **Publish**.

	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	<p>Version No: Draft</p>
		<p>Date: 22/08/2020</p>



5.4 Batch Jobs Run Process

- 1 Log on to the Database Server computer with an Administrator account.
- 2 Start Microsoft SQL Server Management Studio.
- 3 In the left pane, expand SQL Server Agent > Jobs.
- 4 Right-click the job you want to start, and then click Start Job at Step.
- 5 On the Start Jobs window, review any messages.

	<p style="text-align: center;">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020

6. APIs

6.1 List of Server APIs


S. No	API Name	Purpose	API Full Path
USER			
1	userAuthentication	User Authentication	http://localhost/ScadaClient/api/userAuthentication
2	userdetail?userid=0	Getting User Details	http://localhost/ScadaClient/api/userdetail?userid=0
3	userdetails	To create User	http://localhost/ScadaClient/api/userdetails
4	userdetail?userid='+UserID	To get Particular user Details	http://localhost/ScadaClient/api/userdetail?userid='+UserID
5	Update particular user		http://localhost/ScadaClient/api/EditUser?UserID='+data.UserID+'&FirstName='+data.FirstName+'&LastName='+data.LastName+'&EmpCode='+data.EmpCode+'&Gender='+data.Gender+'&DOB='+data.DOB+'&Department='+data.Department+'&ReportingManager='+data.ReportingManager+'&ReportingManagerID='+data.ReportingManagerID+'&Mobile='+data.Mobile+'&AlternatePhone='+data.AlternatePhone+'&EmailID='+data.EmailID+'&Address='+data.Address+'&DateofJoining='+data.DateofJoining+'&DateofRelieving='+moment(data.DateofRelieving).format('MM/DD/YYYY')+'&RoleID='+data.RoleID+'&ActiveStatus='+data.ActiveStatus
6	ChangePassword	To change Password	http://localhost/ScadaClient/api/ChangePassword



User Manuel
OF ECSCADA –Web APPLICATION
Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD


Version No:
Draft
Date:
22/08/2020

Project			
7	ProjectDetails	To create Poject	http://localhost/ScadaClient/api/ProjectDetails
8	projectdetail?projectid=0	To get Project Details	http://localhost/ScadaClient/api/projectdetail?projectid=0
9	Update Particular Project		http://localhost/ScadaClient/api/EditProjectDetails?ProjectID='+data.ProjectID+'&ProjectName='+data.ProjectName+'&ProjectCode='+data.ProjectCode+'&ProjectDesc='+data.ProjectDesc+'&StartDate='+startdate+'&EndDate='+enddate+'&ProjectValue='+data.ProjectValue+'&Location='+data.Location+'&ActiveStatus='+data.ActiveStatus+'&ProjectManagerID='+data.ProjectID+'&ProjectManager='+data.ProjectManager+'&Customer='+data.Customer+'&Consultant='+data.Consultant
Assign User to Project			
10	UsersMapToProjects	To Assign User to Project	http://localhost/ScadaClient/api/UsersMapToProjects
11	UsersMapToProjects	To Get Assign User to Project Details	http://localhost/ScadaClient/api/UsersMapToProjects
12	Update Assign User To Project		http://localhost/ScadaClient/api/EdiMapUsersToProjects?UserMapID='+this.state.user.UserMapID+'&UserID='+this.state.UserID+'&ProjectID='+this.state.ProjectID+'&RoleID='+this.state.user.RoleID+'&Description='+this.state.user.Description+'&AssignedFrom='+AssignedFrom1+'&AssignedTo='+AssignTo1+'&ActiveStatus='+this.state.user.ActiveStatus

	<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>	Version No: Draft
		Date: 22/08/2020


XML Conversions

13	GetExprVal	To Fetch the Tag or Expression Value From Server	http://192.168.0.45/ScadaClient/api/ExpressionEval/GetExprVal
14	TagName	To Fetch The Tag Value	localhost/ScadaClient/api/TagValue?TagName=Dtms_0010
15	uploadFile	To upload Xml File to web server	http://localhost:8000/uploadFile
16	deleteFile	To Delete The XML File	http://localhost:8000/deleteFile
17	Tag values along with type(digital and analog)	Tag values by type and fvalue;	http://localhost/ScadaClient/api/TagValuesByType?TagName=Dtms_0011

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		Date: 22/08/2020

6.2 Client APIs

S. No	API Name	Purpose	API Full Path
1	userAuthentication	User Authentication	http://localhost/ScadaClient/api/userAuthentication
2	userdetail?userid=0	Getting User Details	http://localhost/ScadaClient/api/userdetail?userid=0
3	userdetail?userid='+UserID	To get Particular user Details	http://localhost/ScadaClient/api/userdetail?userid='+UserID
4	ChangePassword	To change Password	http://localhost/ScadaClient/api/ChangePassword
5	EventsAlarms	To get Events&Alarms	http://localhost/ScadaClient/api/EventsAlarms
6	alarms	To get Alarms	http://localhost/ScadaClient/api/alarms
7	GroupName?GroupName=	To Fetch Group Names	http://localhost/ScadaClient/api/GroupName?GroupName=
8	GroupwithTrendsTimestamp?GroupName=' + selectedGroupName	To Fetch Particular Group Name	http://localhost/ScadaClient/api/GroupwithTrendsTimestamp?GroupName=' + selectedGroupName
9	Historic Alarms	To fetch Historic Alarms Data	http://localhost/ScadaClient/api/HistoricAlarms?StartDate='+ Startdate+'&EndDate='+ EndDate+'&TagName=&Flag=2
10	Historic Event	To Fetch Historic Event Data	http://localhost/ScadaClient/api/HistoricAlarms?StartDate='+ Startdate+'&EndDate='+ EndDate+'&TagName=&Flag=1
11	Historic Trend	To Fetch Historic Trend Data	http://localhost/ScadaClient/api/FileRead?PointName="+selectedGroup+"&FromDt="+startdate+"&ToDt="+enddate;
XML Conversions			
12	GetExprVal	To Fetch the Tag or Expression Value From Server	http://192.168.0.45/ScadaClient/api/ExpressionEval/GetExprVal
13	TagName	To Fetch The Tag Value	localhost/ScadaClient/api/TagValue?TagName=Dtms_0010

		<p align="center">User Manuel OF ECSCADA –Web APPLICATION Doc No: UNCL/ECIL/ASD/RTS/EC-WB/UMD</p>		Version No: Draft
				Date: 22/08/2020
14	Area trends based on Tagname	trends based on Tag name	localhost/ScadaClient/api/GetTagDetailsfromcurrenttrend?TagName=DTms_0010	