



# CTX-Task-Scheduler Deployment Plan

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## Versions

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### Document Revisions

The following revisions have been made to this document

Date	Revision	Notes
04/12/2018	1.0	First release
05/10/2021	2.0	2 <sup>nd</sup> Release
16/11/2021	2.1	Added section 4 for Active Directory related PowerShell module installation steps  Updated Config file with additional flag for enabling on Startup scheduling option

### Module Versions

This version of the CTX-Task-Scheduler Deployment Plan is relevant up to version 2.0 of the CTX-Task-Scheduler module.

## Preface

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### About this Manual

This document provides a guide on how to deploy the CTX-Task-Scheduler module in your Cortex system.

### Audience

This document is intended for those who require the use of CTX-Task-Scheduler module.

### Related Material

Document
CTX-Task-Scheduler – User Guide
CTX-Task-Scheduler.studiopkg
Patch for Cortex Scheduling at Cortex Server Service Startup
KB-Manual-Update-Instructions
Patch KB for Cortex 7.1 : ctx-task-scheduler.kb

### Abbreviations used in this Document

**SQL**      Structured Query Language

## 1 Requirements

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This document details all the steps required to deploy the CTX-Task-Scheduler module.

Requirements:

- Remote Desktop Access to the Cortex Application Server
- Minimum Cortex v6.4 installed on the Cortex Application Server

## 2 Import CTX-Task-Scheduler

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To deploy the CTX-Task-Scheduler module on your Cortex system, the CTX-Task-Scheduler Studio Package needs to be imported on your Cortex system. To do this:

- Download the CTX-Task-Scheduler Studio Package
- Import the Studio Package in Cortex Gateway
- Ensure the relevant users have the required permissions in 'Studio Authorisation'

After this, all users in the authorised groups will be able to view and execute the subtasks.

### 3 Publish Flows

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Once the studiopkg file is imported the flows can then be published, which will make them available in LivePortal. To do this, perform the following steps:

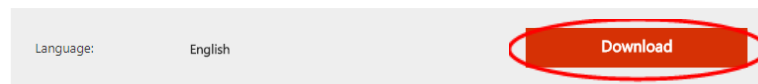
- From Cortex Gateway, select 'Settings' – 'Studio Publish'
- Tick the Cortex Task Scheduler group under 'Tools'
- Click Publish

## 4 Active Directory Segregation – Installation of PowerShell modules

### 4.1 Updating PowerShell to v5

- On the Cortex server where PowerShell version 5 will be installed, navigate to the following link:
  - [`https://www.microsoft.com/en-us/download/details.aspx?id=50395&tdid=\(162666df8fd7d1ab0239724a9bec1eca\)\(266696\)\(1503186\)\(61836X1384699Xf82af593098584c381b4505006d7472d\)\(\)`](https://www.microsoft.com/en-us/download/details.aspx?id=50395&tdid=(162666df8fd7d1ab0239724a9bec1eca)(266696)(1503186)(61836X1384699Xf82af593098584c381b4505006d7472d)())
- Click the 'Download' button

Windows Management Framework 5.0



Windows Management Framework 5.0 includes updates to Windows PowerShell, Windows PowerShell Desired State Configuration (DSC), Windows Remote Management (WinRM), Windows Management Instrumentation (WMI). Release notes: <http://go.microsoft.com/fwlink/?LinkID=717903>

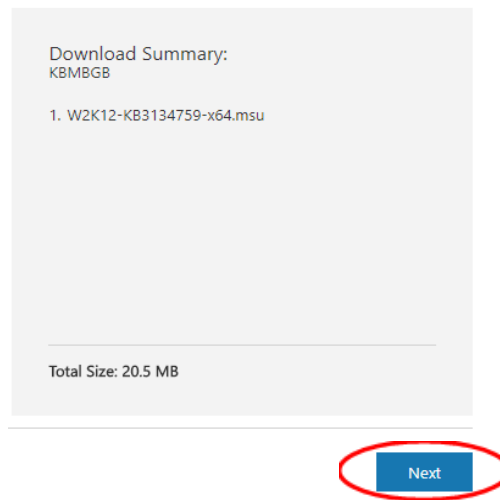
Choose the download you want

<input type="checkbox"/> File Name	Size
<input type="checkbox"/> W2K12-KB3134759-x64.msu	20.5 MB
<input type="checkbox"/> Win7AndW2K8R2-KB3134760-x64.msu	20.8 MB
<input type="checkbox"/> Win7-KB3134760-x86.msu	16.2 MB
<input type="checkbox"/> Win8.1AndW2K12R2-KB3134758-x64.msu	18.8 MB
<input type="checkbox"/> Win8.1-KB3134758-x86.msu	14.4 MB

- Select the version required for the server where PowerShell is being installed



- Click 'Next'



- Select a location to download the file
- Navigate to the following link and follow the relevant instructions:
  - a. <https://docs.microsoft.com/en-us/powershell/wmf/5.0/requirements>

## 4.2 Installing Active Directory Module

To install the Active Directory module run the following command in PowerShell as an Administrator

`Install-WindowsFeature -Name "RSAT-AD-PowerShell" -IncludeAllSubFeature`

## 5 Configuration Setup

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In order to enable AD control for the module, a config file needs to be setup in the cortex application server.

Login to Cortex Application Server, Copy the below file to C:\Cortex\ Directory. Configure the file as per client specification. Refer to the user guide for each of the parameter and related default values, in case the file is not used.



ts-generic-config.txt

### 5.1 Patch for Enabling on Startup Scheduling Option

**Note :** Skip this step, for Cortex Release v7.2 (This patch is not required)

**For Cortex Release v7.1:**

- In order to enable scheduling flow at Startup, a patch needs to be applied .[Refer : Patch KB for Cortex 7.1 : ctx-task-scheduler.kb]
- This patch is tested for Cortex V7.1. Cortex Task Scheduler KB updates – to be deployed in all Cortex App servers. Restart Cortex Server Service after this deployment.
- In case you wish to add the KB updates manually , refer to ‘KB-Manual-Update-Instructions’ document.

**For All Previous releases up to v7.1:**

- Add the KB updates manually , refer to ‘KB-Manual-Update-Instructions’ document.

## 6 Permissions

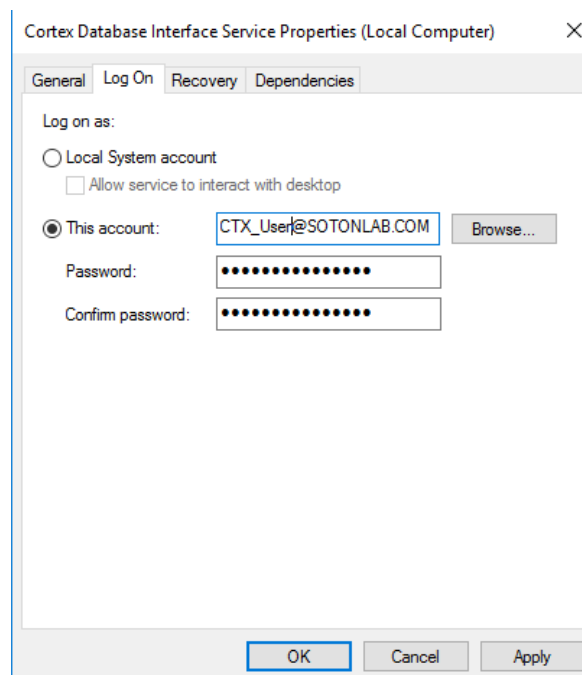
Authentication is handled using the Cortex Database Interface service user. This user must have:

- read permissions to CortexWeb and CortexWeb.Auth database
- read and write permissions to Reactor database

DB sysadmin permissions are required to change user permissions, and access to the DB via SSMS or otherwise.

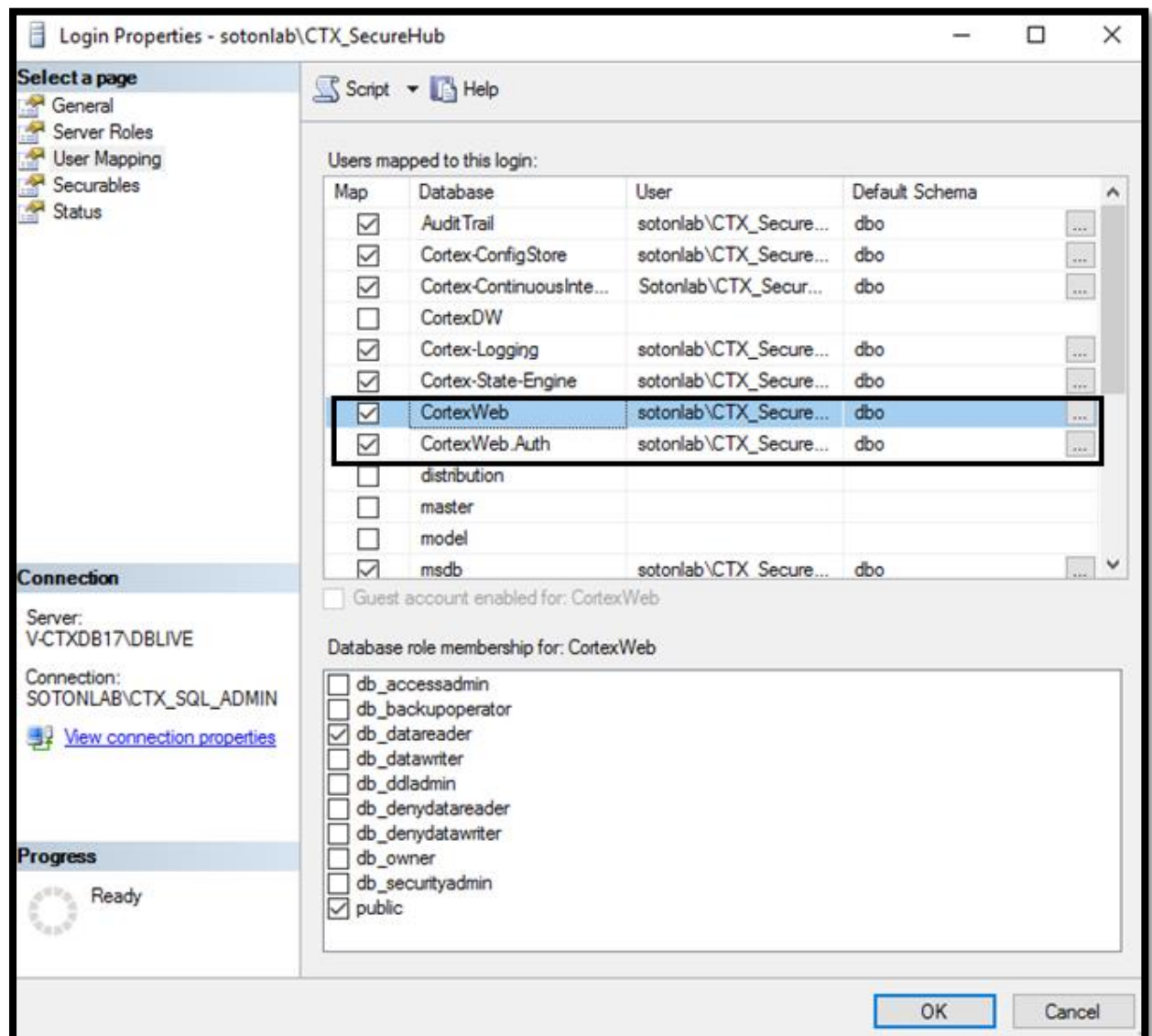
### Finding the Cortex Database Interface Service account user

To find out who the Cortex Database Interface service account user is, open 'Services' and click on the properties of the 'Cortex Database Interface Service'. Navigate to the 'Log On' tab and the name of the account is next to 'this account'.



### Changing Read permissions on a DB

To change the Read permissions open the 'Microsoft SQL Server Management Studio' and on the left-hand side click on the 'security' folder, then 'Logins' folder. Right click on the Cortex Database Interface service account and click 'properties'.



Then click on 'User Mappings' and then 'CortexWeb' and CortexWeb.Auth Databases. Ensure the 'db\_datareader' is ticked and then press 'OK'.

To change permissions for the 'Reactor' DB click on the Reactor tick box and then ensure 'db\_datawriter' and 'db\_datareader' is selected.