

[Tech Note 1010](#)

SQL Server Authentication and ArcestrA Network Account Restrictions When Installing Wonderware Historian

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Introduction

This Tech Note outlines SQL server Authentication and ArcestrA Network account restrictions when installing Wonderware Historian.

Application Versions

- Wonderware Historian 10.0 SP1 P01 (System Platform 2012)
- Wonderware Historian 11.0 (System Platform 2012 R2)
- Wonderware Historian 11.5 (System Platform 2014)
- Microsoft SQL Server 2008 R2 SP1 32 bit / 64 bit
- Microsoft SQL Server 2012 32 bit / 64 bit

ArcestrA Network Account Restrictions

If you need to install or run Wonderware Historian using a local machine user, the ArcestrA Network Account for that user should be a member of the **aaUser**, **aaAdministrator**, and **aaReplicationUsers** local user groups (Figure 1 below).

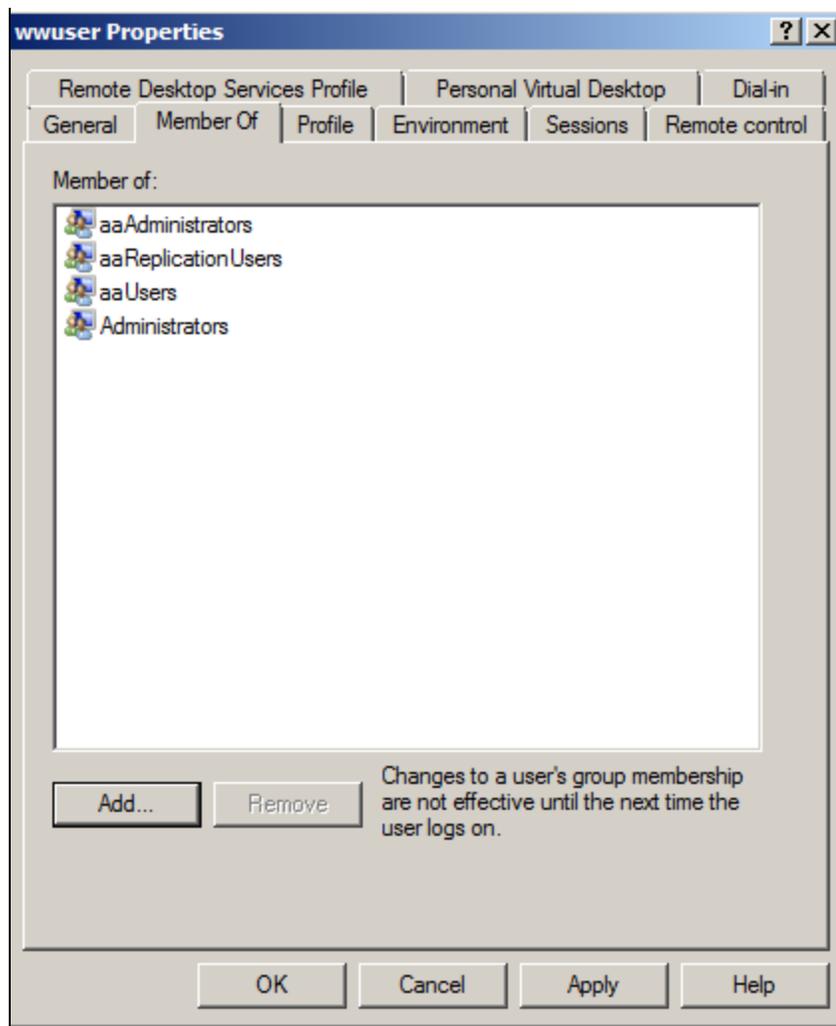


FIGURE 1: LOCAL USER ACCOUNTS

- When using a domain account or domain group, you either need to use Historian version 11.0-Patch01 or higher, or you have to add the domain account itself (not the domain group) to previous local user groups. This ensures that Wonderware Historian will work without any issues.

If you are using Historian version 11.0, you can apply Hotfix **CR L00127062** to enable you to add domain groups instead of a specific domain account (this Hotfix is already included in Historian 11.0 Patch 01).

- There are also some restrictions regarding the ArcestrA account user name and password; you may only use ASCII characters and you are limited to 23 characters maximum.

Microsoft SQL Server Account

If you are using Windows Authentication to connect to Microsoft SQL Server, there are two ways to configure it for use with Historian

Server:

- You can create the account in SQL Server Management Studio and assign it to the desired database roles for Runtime.

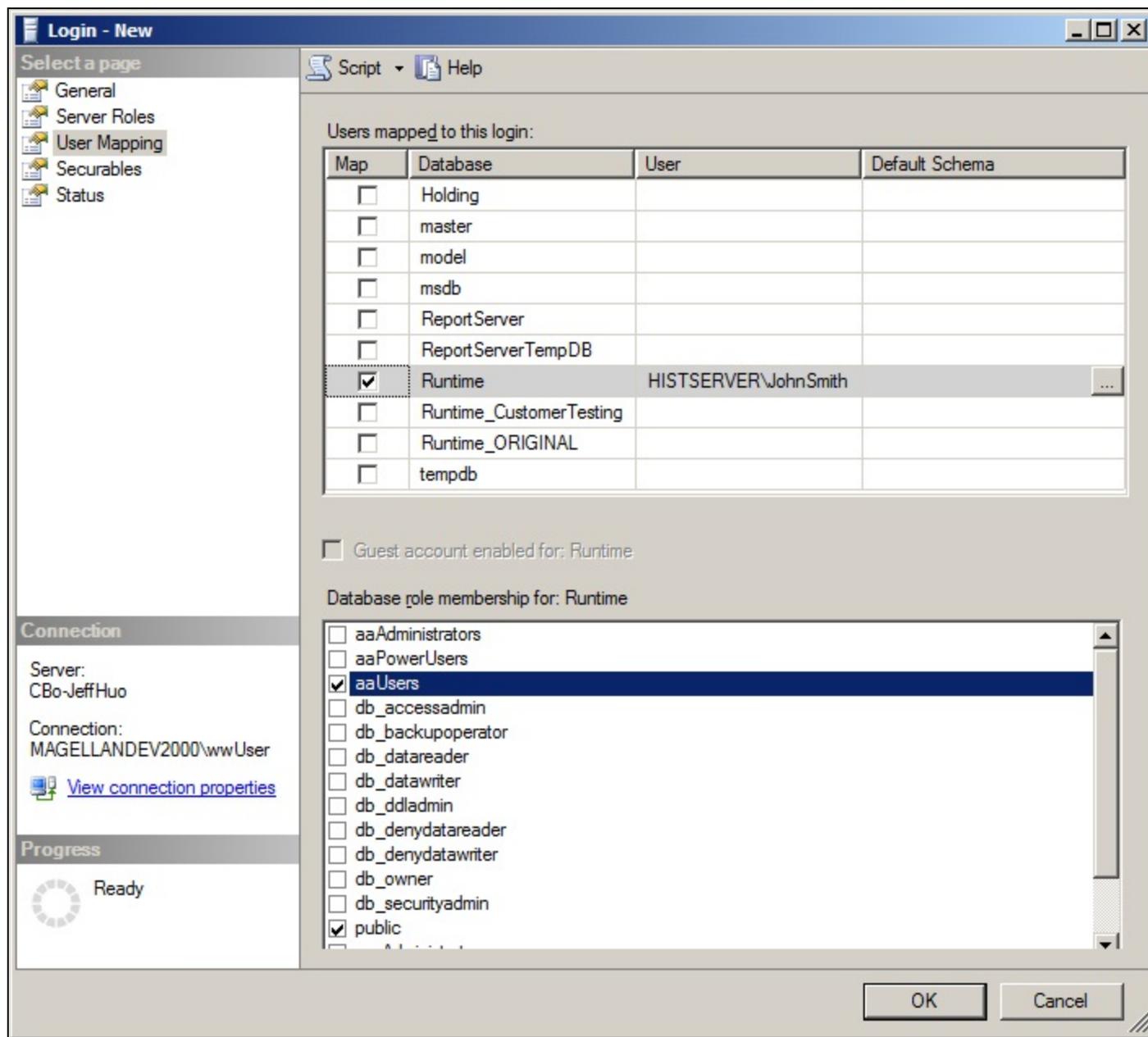


FIGURE 2: ASSIGN USER MAPPING

OR

- You can use the built-in Windows user groups that get created during Historian Server product installation, and simply add the users to those groups.

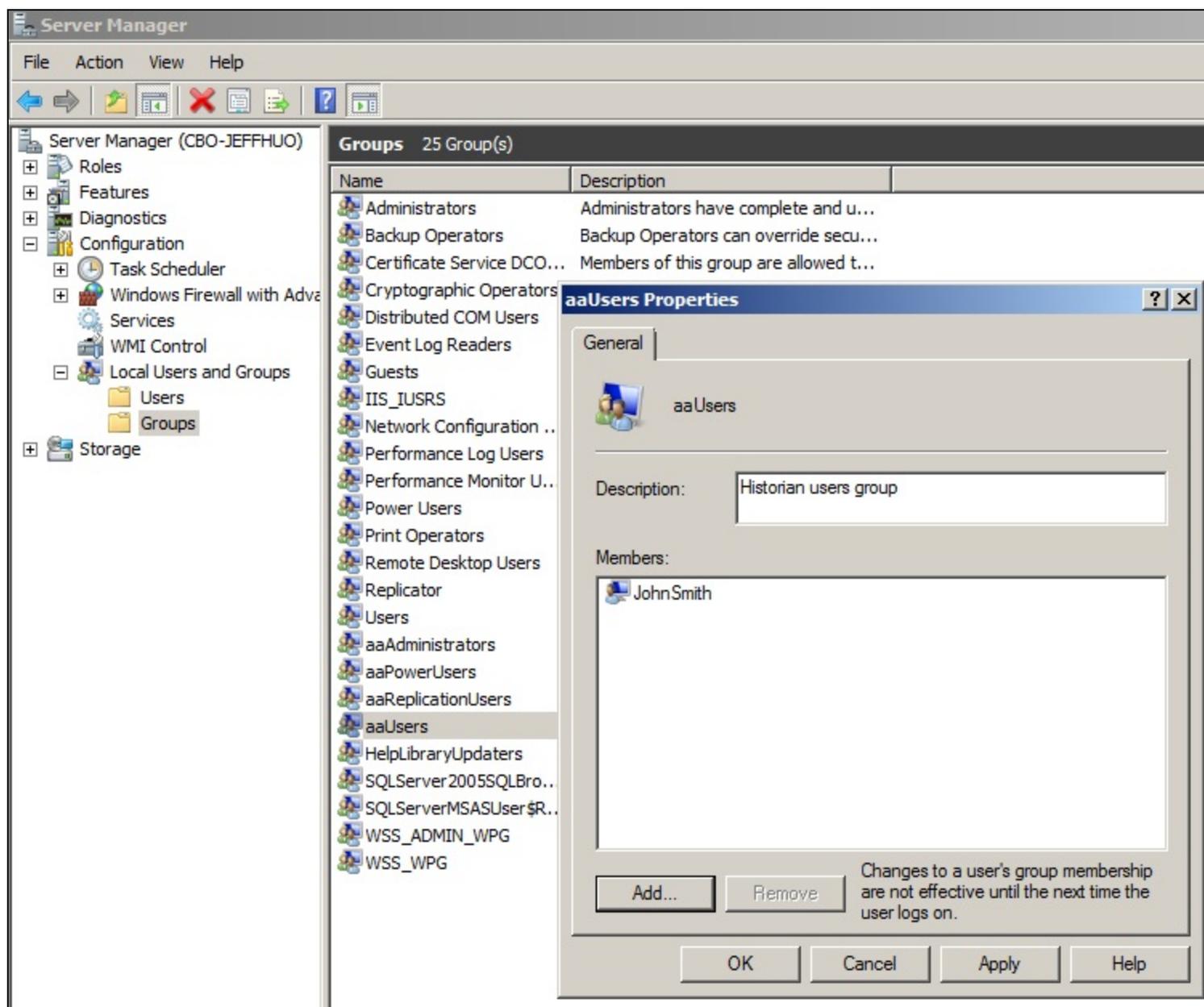


FIGURE 3: ADD USERS TO THE aaUSERS HISTORIAN GROUP

Microsoft SQL Server Configuration

When you install Microsoft SQL Server for Wonderware Historian 10.0 SP1 P01 you have to install the 32-bit version of SQL Server

regardless of which operating system you have (see [Tech Note #682](#) for more details). But when you install it for Historian 11.0 you can install either the 32-bit or 64-bit version if your operating system permits.

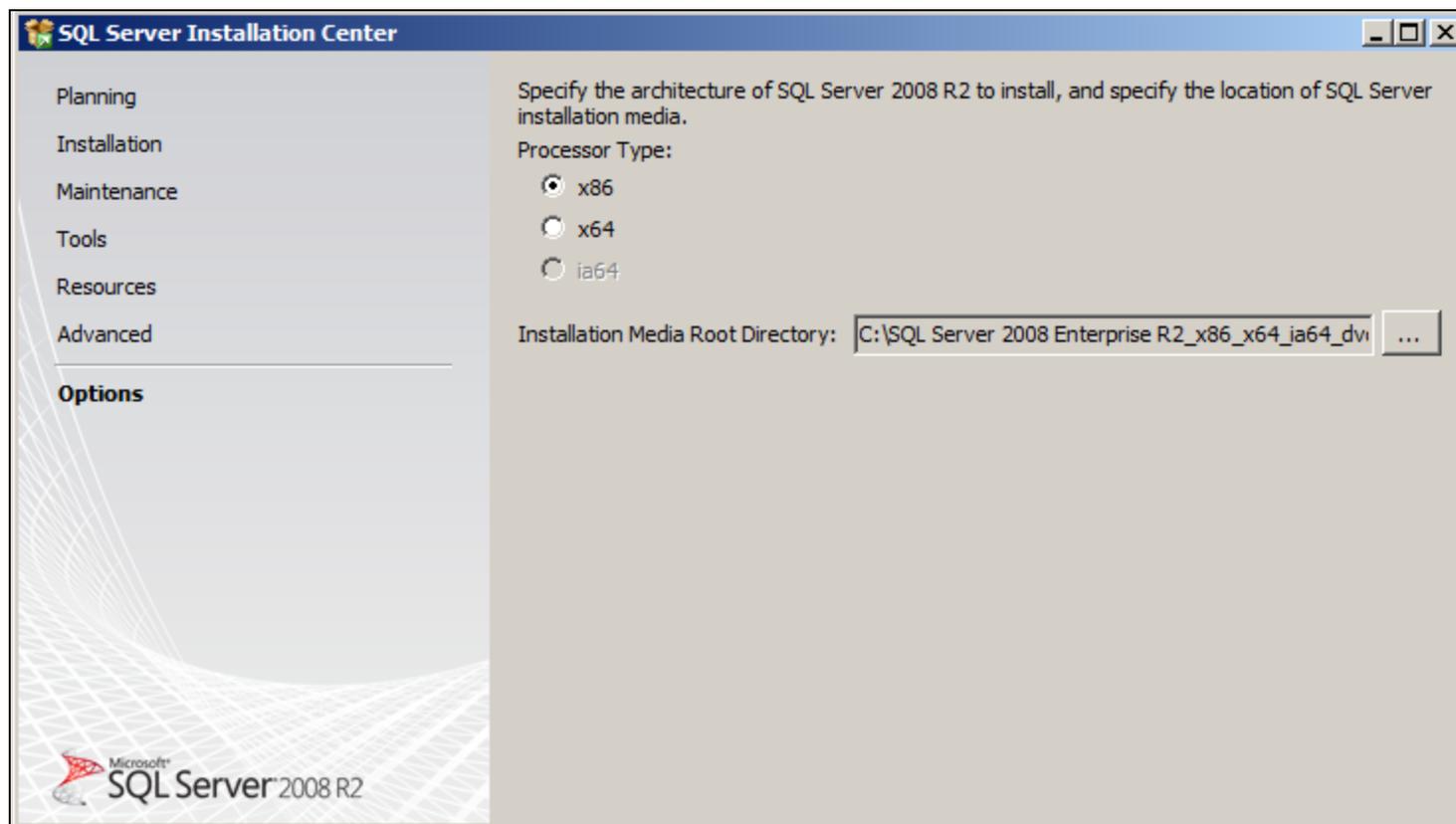


FIGURE 4: HISTORIAN 11 INSTALLATION TYPES

If you are configuring Microsoft SQL Server on a machine that has another Wonderware product like Application Server, InTouch, etc. you must configure Microsoft SQL Server to use **Mixed Mode** authentication to log in to the system.

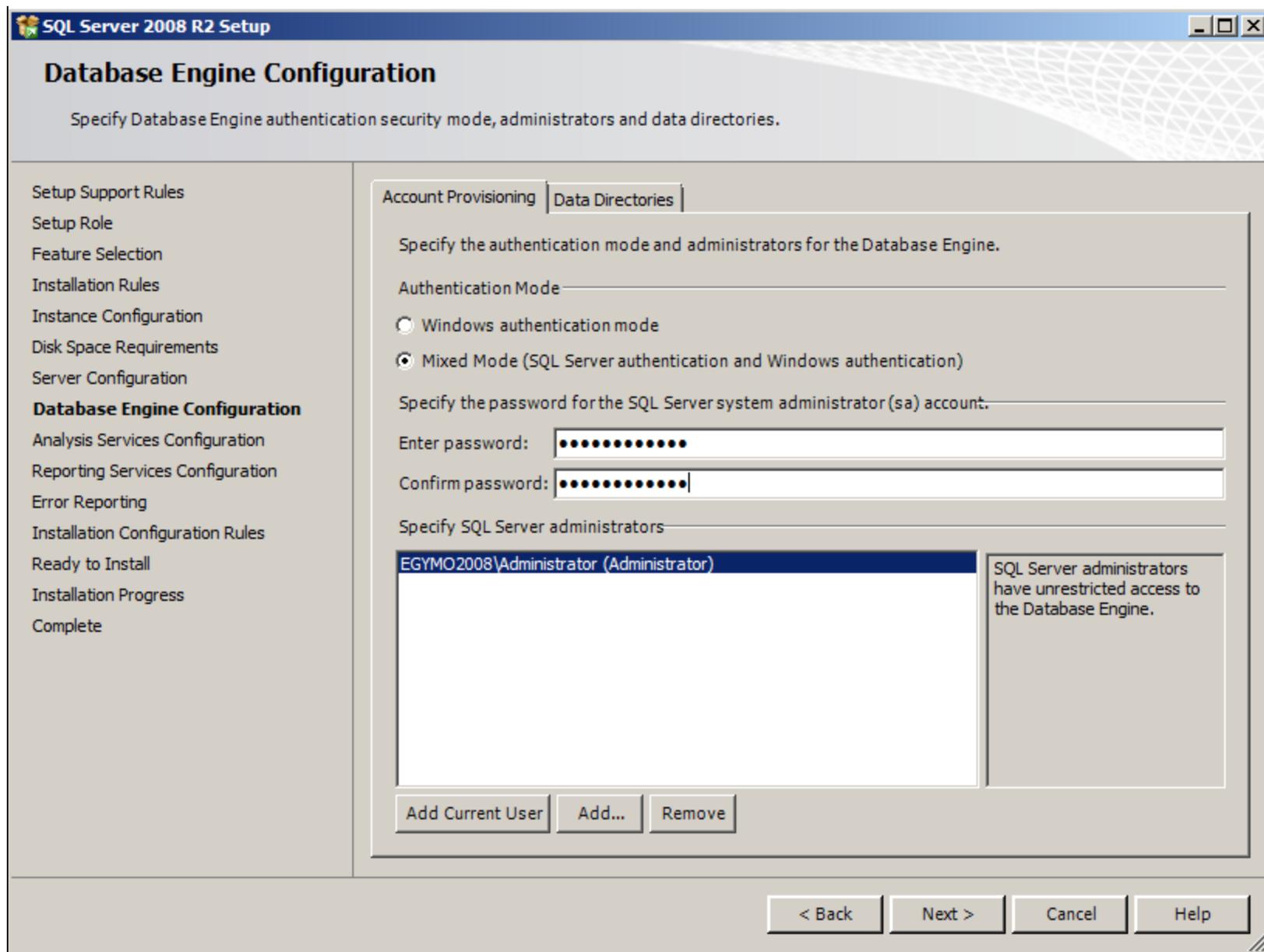


FIGURE 5: MIXED MODE SQL SERVER AUTHENTICATION

If you are preparing the machine for *only* Wonderware Historian you can configure it to use only Windows authentication if you wish (Figure 6 below), but it is recommended to use Mixed Mode in case other Wonderware products are installed at a later time.

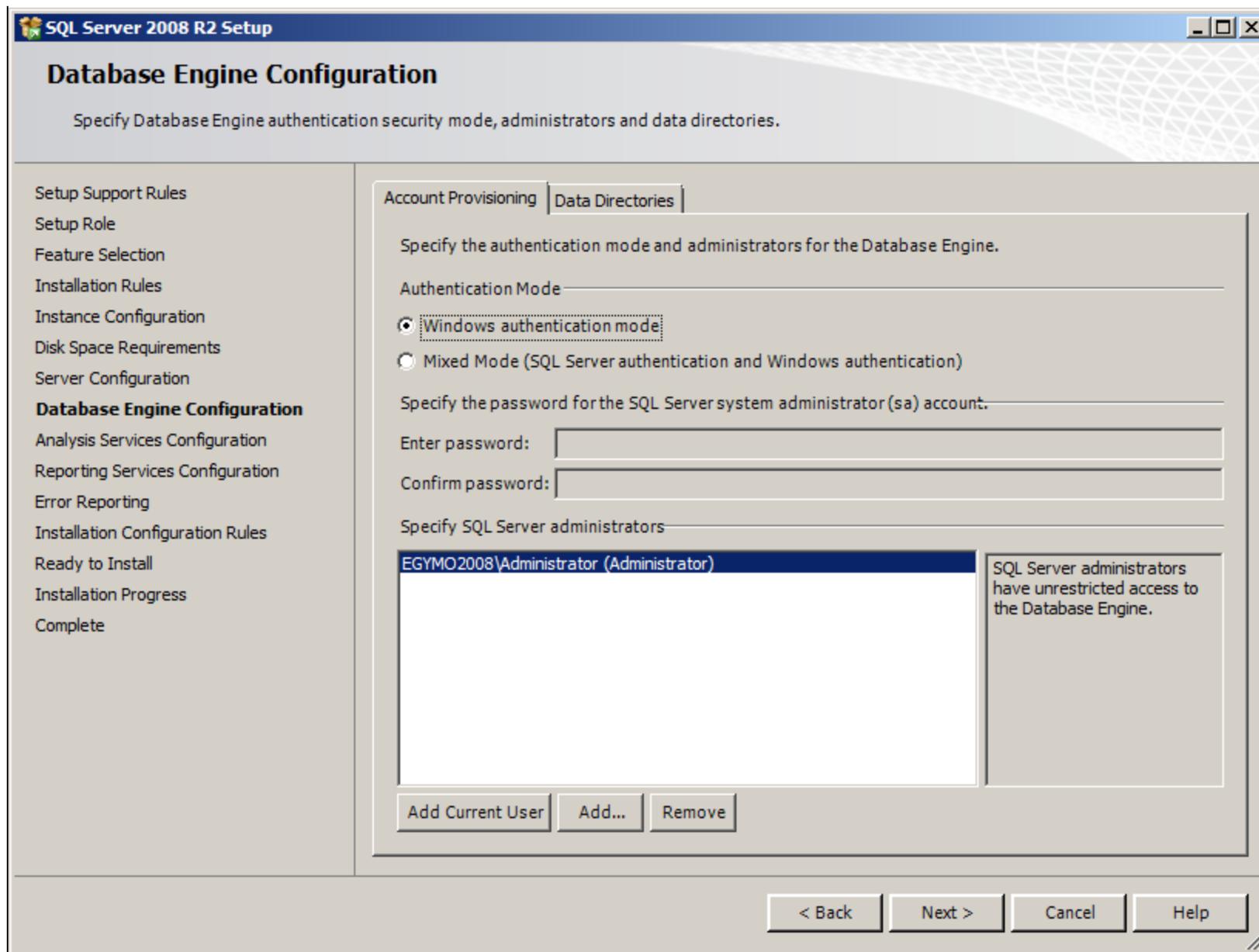


FIGURE 6: OPTIONAL WINDOWS AUTHENTICATION MODE FOR HISTORIAN-ONLY INSTALLATION

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