



# AimBetter

## Installation Guide

## **Overview**

AimBetter is a SaaS database performance monitoring.

To install Aimbetter you are required for 2 step;

- 1) Create your account on Aimbetter cloud application.
- 2) Install Aimbetter Agent on your server.

## **Create your Aimbetter account**

To create a Aimbetter account, go to Aimbetter's [signup page](https://app.aimbetter.com/signup) (<https://app.aimbetter.com/signup>)

1. Follow the online steps to create your account.
2. Agree to the [Terms of Service](#) .
3. When you receive an email confirmation message, select the link to confirm your account.
4. Than you will get another mail contains your agent license key's.

## **Install Aimbetter agent**

See [client agent requirements](#).

Download agent setup file from [setup file](#) (<http://update.aimbetter.com/>)

1. Run agent install package.
2. To activate agent, enter your AimBetter agent license key's (Send to your email during account creation).
3. Add Host and SQL servers to monitor follow the instructions.

## **Start working with Aimbetter**

Go to [Aimbetter application](https://app.aimbetter.com/) (<https://app.aimbetter.com/>)

\* To get you credentials write to [support@aimbetter.com](mailto:support@aimbetter.com)

**Client agent requirements**

Requirement	Details
Platform	1 GHz Pentium® 4 PC
Memory	1 GB RAM
Hard disk space	200 MB This space should exist on a local disk drive.
Operating system	Microsoft® Windows® 10 (32-bit and 64-bit) Microsoft Windows 8.1 (32-bit and 64-bit) Microsoft Windows 8 (32-bit and 64-bit) Microsoft Windows 7 (32-bit and 64-bit) Microsoft Windows Server® 2012 R2 (64-bit) Microsoft Windows Server 2012 (64-bit) Microsoft Windows Server 2008 R2 (64-bit) Microsoft Windows Server 2008 (32-bit and 64-bit) Microsoft Windows Server 2016 (32-bit and 64-bit)
.NET	It is recommended that the latest .NET be installed. Minimum .NET 4.5.
Internet Access	Allow outbound traffic to api.montarget.com Port 433

## Server monitoring

Requirement	Details
SQL Server	<p>Aimbetter can monitor SQL Server instances of the following versions:</p> <ul style="list-style-type: none"> <li>• SQL Server 2017 (32-bit and 64-bit)</li> <li>• SQL Server 2016 (32-bit and 64-bit)</li> <li>• SQL Server 2014 (32-bit and 64-bit)</li> <li>• SQL Server 2012 (32-bit and 64-bit)</li> <li>• SQL Server 2008 R2 (32-bit and 64-bit)</li> <li>• SQL Server 2008 (32-bit and 64-bit)</li> <li>• SQL Server 2005 (32-bit and 64-bit)</li> </ul> <p>Aimbetter supports all SQL Server sort orders, including case-sensitive and binary sort orders.</p>
Windows Server	<p>Aimbetter can monitor the following operating systems:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2016 (32-bit and 64-bit)</li> <li>• Microsoft Windows 10 (32-bit and 64-bit)</li> <li>• Microsoft Windows 8.1 (32-bit and 64-bit)</li> <li>• Microsoft Windows 8 (32-bit and 64-bit)</li> <li>• Microsoft Windows 7 (32-bit and 64-bit)</li> <li>• Microsoft Windows Vista (32-bit and 64-bit)</li> <li>• Microsoft Windows Server 2012 R2 (64-bit)</li> <li>• Microsoft Windows Server 2012 (64-bit)</li> <li>• Microsoft Windows Server 2008 R2 (64-bit)</li> <li>• Microsoft Windows Server 2008 (32-bit and 64-bit)</li> <li>• Microsoft Windows Server 2003 (32-bit and 64-bit), however as this operating system is deprecated, WMI issues will no longer be investigated by support.</li> </ul> <p>On each monitored instance, Aimbetter requires the network setting "File and Print Sharing" to be enabled and any firewall to be configured to:</p> <ul style="list-style-type: none"> <li>• open port 1434 for UDP packets</li> <li>• open the SQL Server TCP port (default is 1433)</li> </ul> <p>And enable the following firewall programs:</p> <ul style="list-style-type: none"> <li>• Windows Management Instrumentation (WMI)</li> <li>• Performance Logs and Alerts</li> </ul>

## Permissions

### During installation

Aimbetter agent needs permission to start services.

### During operation

The minimum Windows privilege level required to run the Aimbetter agent is Power User. Aimbetter on SQL Server requires the following permissions to successfully connect to a SQL Server instance. This information is specified when a new Windows or SQL Server instance is configured through the Aimbetter configuration.

### SQL Server permissions required on the Aimbetter agent

#### SQL Server account permissions:

Ensure each SQL Server connection from the Aimbetter agent has one of the user access permission to a SQL Server:

1. Account that is a member of the sysadmin server role (Support all feature)
2. Account with operation permission see the following SQL script (SQL Waits currently not supported) or download script from here [Aimbetter user creation](#)

```
USE [master]
GO
CREATE LOGIN [AimBetter] WITH PASSWORD=N'æ_P6f6p5se',
DEFAULT_DATABASE=[tempdb], DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF,
CHECK_POLICY=OFF
GO
ALTER LOGIN [AimBetter] WITH PASSWORD=N'_P6f6p5se';
GO
CREATE USER [AimBetter] FOR LOGIN [AimBetter]
GO
-- 1) access to DMV system view for performance
GRANT VIEW ANY DATABASE TO [AimBetter]
GO
GRANT VIEW SERVER STATE TO [AimBetter]
GO
GRANT VIEW ANY DEFINITION TO [AimBetter]
GO
-- 2) extended event(exception & deadlocks)
IF EXISTS (SELECT * FROM sys.databases
WHERE LOWER(name) = 'tempdb' AND compatibility_level>100)
EXEC('GRANT ALTER ANY EVENT SESSION TO [AimBetter]')
ELSE
GRANT CONTROL SERVER TO [AimBetter]
GO
-- 3) Trace Flag : 7826 ,Function: Disable Connectivity ringbuffer
DBCC TRACEON (7826, -1);
GO
--4) sql error & job activity . system procedure
grant EXECUTE on xp_servicecontrol to AimBetter
grant EXECUTE on xp_enumerrorlogs to AimBetter
grant EXECUTE on xp_readerrorlog to AimBetter
grant EXECUTE on xp_sqlagent_enum_jobs to AimBetter
grant execute on xp_regread to AimBetter
GO
```

```

--5)-----
--The proc enable to get
--table size ,miss indexes ,index issue ,index activity
----use this info for change tracking

--6) run the script result os sys admin in order to update permissions on new
databases
IF OBJECT_ID('DBA_AimBetter_Users') IS NOT NULL
  DROP PROC DBA_AimBetter_Users
GO
CREATE PROC DBA_AimBetter_Users
AS
IF OBJECT_ID('tempdb..#DB') IS NOT NULL
  DROP TABLE #DB;
CREATE TABLE #DB (DB sysname)
INSERT #DB
EXEC sp_MSforeachdb '
IF DATABASEPROPERTYEX (''?','Status')='ONLINE'
BEGIN
USE [?]
SELECT DB_NAME() FROM sys.database_principals where type_desc = 'SQL_USER'
and default_schema_name = 'dbo'
END
';

--7) -VIEW DEFINITION ON SCHEMA = show only definition . you cant drop object
DECLARE @CMD VARCHAR(MAX)
SET @CMD=''
SELECT @CMD=@CMD+'

USE ['+name +']
BEGIN TRY
CREATE USER [AimBetter] FOR LOGIN [AimBetter];
GRANT VIEW DEFINITION ON SCHEMA::[dbo] TO [AimBetter]
END TRY
BEGIN CATCH
END CATCH
'

FROM sys.databases
WHERE name IN(SELECT DB FROM #DB) AND
state =0
SELECT @CMD
IF @CMD<>''
BEGIN
PRINT @CMD
EXEC(@CMD)
END
GO
EXEC DBA_AimBetter_Users
GO
--8) msdb use to get job activitiy and definition
USE [msdb]
GO
DECLARE @jobId BINARY(16)
EXEC msdb.dbo.sp_add_job @job_name=N'DBA_AimBetter_Users',
@enabled=1,
@notify_level_eventlog=0,
@notify_level_email=2,
@notify_level_netsend=2,
@notify_level_page=2,
@delete_level=0,
@category_name=N'[Uncategorized (Local)]',

```

```

@job_id = @jobId OUTPUT
select @jobId
GO
EXEC msdb.dbo.sp_add_jobserver @job_name=N'DBA_AimBetter_Users'
GO
EXEC msdb.dbo.sp_add_jobstep @job_name=N'DBA_AimBetter_Users',
@step_name=N'DBA_AimBetter_Users',
@step_id=1,
@cmdexec_success_code=0,
@on_success_action=1,
@on_fail_action=2,
@retry_attempts=0,
@retry_interval=0,
@os_run_priority=0, @subsystem=N'TSQL',
@command=N'DBA_AimBetter_Users',
@database_name=N'master',
@flags=0
GO
EXEC msdb.dbo.sp_update_job @job_name=N'DBA_AimBetter_Users',
@enabled=1,
@start_step_id=1,
@notify_level_eventlog=0,
@notify_level_email=2,
@notify_level_netsend=2,
@notify_level_page=2,
@delete_level=0,
@description=N'',
@category_name=N'[Uncategorized (Local)]',
@notify_email_operator_name=N'',
@notify_netsend_operator_name=N'',
@notify_page_operator_name=N''
GO
DECLARE @schedule_id int
EXEC msdb.dbo.sp_add_jobschedule @job_name=N'DBA_AimBetter_Users',
@name=N'DBA_AimBetter_Users',
@enabled=1,
@freq_type=4,
@freq_interval=1,
@freq_subday_type=1,
@freq_subday_interval=0,
@freq_relative_interval=0,
@freq_recurrence_factor=1,
@active_start_date=20160727,
@active_end_date=99991231,
@active_start_time=0,
@active_end_time=235959, @schedule_id = @schedule_id OUTPUT
select @schedule_id
GO
EXEC sp_addrolemember N'db_datareader', N'AimBetter'
GO
EXECUTE sp_addrolemember
@rolename = 'SQLAgentReaderRole',
@membername = 'AimBetter'
GO
EXECUTE sp_addrolemember
@rolename = 'TargetServersRole',
@membername = 'AimBetter'
GO
grant execute on dbo.sp_help_jobhistory to AimBetter
GO
GRANT SELECT ON [dbo].[sysjobschedules] TO AimBetter
GO

```

```
GRANT SELECT ON [dbo].[sysjobs] TO AimBetter
GRANT SELECT ON [dbo].[sysjobhistory] TO AimBetter
```

### Windows permissions required on the Aimbetter agent

To retrieve performance counter information, the Aimbetter agent executes WMI queries and Performance Monitor reports against the Windows server on which SQL Server is currently running. To do this, the Aimbetter agent needs to have access to a Windows account that can retrieve this information. This account should be Membership in the target computer's **Performance Log Users** group, or equivalent, is the minimum required to complete this procedure.

On each Windows server this group should have permission to execute WMI.

Follow this steps to grant WMI permissions:

1. Under Services and Applications, bring up the properties dialog of WMI Control (or run `wmimgmt.msc`). In the Security tab, highlight Root/CIMV2, click Security; add **Performance Log Users** and enable the options: Enable Account and Remote Enable.
2. Run `dcomcnfg`. At Component Services > Computers > My Computer, in the COM security tab of the Properties dialog click "Edit Limits" for both Access Permissions and Launch and Activation Permissions. Add Performance Monitor Users and allow remote access, remote launch, and remote activation.
3. Select Windows Management Instrumentation under Component Services > Computers > My Computer > DCOM Config and give Remote Launch and Remote Activation privileges to **Performance Log Users** Group

### Internet permissions required on the Aimbetter agent:

Agent must be able to reach the Internet to access our APIs. You may need to permit access to port 443 on our API (DNS name `api.montarget.com`) in your firewall.

If necessary, the agents support an HTTP proxy setting in the configuration file or the environment.