

Toad® Intelligence Central 6.0

Release Notes

Tuesday, June 21, 2022

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About Toad Intelligence Central

Toad® Intelligence Central enables enterprise users to be far more productive with their tools including Toad Data Point by centralizing automation workflows, accessing data directly, collaborating and sharing on datasets, queries and Toad files and providing a secure and established way to manage your data sprawl.

- **AUTOMATE** - Toad users can schedule the regular automated execution of Toad Data Point automation scripts on Toad Intelligence Central.
- **ACCESS** - Toad users can access Toad files and basic data files published to Toad Intelligence Central that have been shared with them. An additional data connectivity license extends Toad Intelligence Central to work across a wide range of data stores including relational database models, data warehouses, No SQL and Business Intelligence data sources like OBIEE and SAP®.
- **SHARE** - Objects can be shared amongst users and groups and organized collectively in a familiar folder structure, assigned tags and given a description for easy search retrieval. Administration of users and groups can be managed locally or users and groups can be imported from Active Directory®.
- **SECURE** - Toad Intelligence Central provides a centrally managed, secure, stable and accessible system.

Distributions of Toad Intelligence Central include a Web Server for administrative and general user access. In addition, Toad Data Point and other collaborative Toad products can directly access Toad Intelligence Central. Data on Toad Intelligence Central can be accessed via a third party product such as Tableau for further data processing and visualization.

Data Connectivity

A valid data connectivity license supports the following Business Intelligence Data Sources.

- Google Analytics™
- Oracle® Business Intelligence Enterprise Edition 10g and 11g
- SAP® Business Objects Query as a Web Service (QAAWS) XI 3.0, 3.1 and 4.1
- Salesforce.com®
- SharePoint® Lists using Data Services over SharePoint Server 2010 and later via OData. Also, SharePoint Online.
- Hive™
- Microsoft® Analysis Services
- OData - Generic for any OData service versions 1, 2, 3 and 4.

Intelligence Central 6.0 is a minor release, with enhanced features and functionality. See [New features](#).

New Features

This release of Toad Intelligence Central includes new features and enhancements.

Toad Intelligence Central 6.0

- The embedded MySQL has been upgraded from 5.7.25 to 5.7.37.
- MySQL Connector has been upgraded from version 8.0.24 to 8.0.29.

See [Resolved issues](#) for enhancements and resolved issues in this release of Toad Intelligence Central.

Deprecated Features

Integration with Toad for Oracle has been discontinued. The Toad for Oracle Code Quality, Code Analysis, Code Tester, Team Coding, and DB Health Check pages have been removed in Toad Intelligence Central 5.0. Beginning with Toad for Oracle 13.1, you can no longer connect to Toad Intelligence Central and you cannot publish scripts, files, Code Analysis results, and other resources to a Toad Intelligence Central server.

The Admin Console. Beginning with Toad Intelligence Central 4.3, the Admin Console is no longer required and is not included in the Toad Intelligence Central installation. The administrative functionality of the Admin Console is now superseded by the Web Server (Web Console). The activity of mapping/editing data objects is best performed through Toad Data Point.

After installing Intelligence Central 4.3 or later, it is recommended that you uninstall any earlier version of the Admin Console as some functionality may no longer be supported.

Authentication Keys for Views. Beginning with Toad Intelligence Central 4.3, a view can now have only one type of key, personal or shared. This change is designed to simplify the process of Authentication. If you are upgrading from Intelligence Central 3.3 or earlier, please see the Upgrade section of the Toad Intelligence Central Deployment Guide for more information.

Toad for Oracle Installation. Beginning with Toad Intelligence Central 4.3, Toad for Oracle is no longer installed as part of the Toad Intelligence Central installation.

Run in Debug Mode. In Toad Intelligence Central 3.3, the **Run in debug mode** option was removed from the Web console (Web server). It is no longer necessary to enable/disable debug mode. Debug-level information is always logged and automatically included in the support bundle. This release also includes improved logging strategies and archiving methods.

The use of **SSL 3.0**, **TLS 1.0** and **TLS 1.1** has been discontinued.

The use of **RC4** cipher has been discontinued.

The use of **SWEET32** medium strength cipher has been discontinued.

Resolved Issues and Enhancements

The following is a list of issues addressed and enhancements implemented in this release of Intelligence Central.

Resolved Issues in 6.0

Resolved Issue	Issue ID
TIC doesn't recognize Active Directory usernames with dashes "-"	TIC-13750

Resolved Issues in Toad Data Point—If you are using Toad Data Point to publish objects to Intelligence Central or to run Automation scripts on Intelligence Central, you might want to also review resolved issues in the [Toad Data Point Release Notes](#).

Known Issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Installation, upgrade, licenses

Table 1: Known issues with installation, upgrade, migration

Known Issue	Issue ID
<p>Installation of Toad Intelligence Central will fail for a Windows user with administrator permissions if User Account Control Settings is set to Never notify.</p> <p><i>Workaround:</i> Set User Account Control Settings to default or above. To open User Account Control Settings, click Start Control Panel and in the search box type uac.</p>	TIC-4858
<p>The Toad Intelligence Central server runs as three services that start automatically when Windows starts. On installation, services run under the Local System account. Changing the user of any of the services can cause a license failure.</p> <p><i>Workaround:</i> Re-enter the license to Toad Intelligence Central following the Product Licensing instructions.</p>	TIC-2306

Log in, users and groups

Table 2: Known issues with log in, users and groups

Known Issue	Issue ID
<p>On adding users to Intelligence Central from Active Directory and two of those users have the same username (different domain) then only one user will be added to Intelligence Central.</p> <p>Each username on Toad Intelligence Central must be unique.</p>	1922
<p>In some instances, Intelligence Central may not release some connections after the user disconnects. A user may encounter a "number of connections exceeded" message when attempting to connect after the maximum number of connections has been reached. This release of Toad Intelligence Central now allows up to 1024 connections (sessions).</p> <p><i>Workaround:</i> If a new connection cannot be opened because the maximum number of connections has been reached, restart the Toad Intelligence Central server.</p>	N/A
<p>If the machine hosting Toad Intelligence Central is not part of a domain then it will not be able to validate an Active Directory user log in from the Web Server, the Admin Console, or a client application (Toad Data Point).</p>	3253
<p>Web Server: When the Administrator resets the password for an Intelligence Central user or enables an Intelligence Central user from a computer that does not have an email client installed, there may be problems if the Administrator chooses to email the new password to the user.</p>	4087

Known Issue	Issue ID
<p>Web Server: You may experience a failure to log in to a web browser from Windows Server 2008 (64 bit) using Internet Explorer.</p> <p><i>Workaround:</i> Disable Internet Explorer Enhanced Security Configuration. See also Microsoft Technet: https://technet.microsoft.com/en-us/library/dd883248(v=ws.10).aspx</p> <ol style="list-style-type: none"> 1. From the Windows Start menu click All Programs Administrative Tools Server Manager to open the Server Manager. 2. Under Security Information, disable Configure IE ESC. 	2977
<p>Web Server: Failure to connect to a web browser from Windows Server 2012 using Internet Explorer.</p> <p><i>Workaround:</i> From Internet Explorer click Tools Internet Options Security. Add the Web Server as a trusted site to the Internet Explorer Enhanced Security Configuration.</p>	3943
<p>Connections from Toad Data Point to Toad Intelligence Central: Failure to connect to Toad Intelligence Central via a proxy server.</p> <p><i>Workaround:</i> Ensure your Proxy Server is able to connect to the remote host where the Toad Intelligence Central server is running and supports HTTPS traffic.</p>	2086
<p>Toad Data Point 3.8: The Administrator role functionality is not recognized when editing and deleting Intelligence Central groups. An Intelligence Central group can be deleted by the owner of the group and root Administrator only.</p> <p><i>Workaround:</i> Users with the Administrator role can use the Web interface (Web server) to edit and delete Intelligence Central groups.</p>	QAT-6929

Objects published to Intelligence Central

Table 3: Known issues working with objects published to Intelligence Central

Known Issue	Issue ID
<p>When your configuration of Toad Intelligence Central services has been set to run under a Windows account other than "Local System" there is a problem where on upgrade Automation Scripts no longer run. The error is a Licensing Error: License of Toad Data Point instance on the Intelligence Central server is not valid.</p> <p><i>Workaround:</i> There are three steps to the workaround.</p> <ol style="list-style-type: none"> 1. Log in to the Windows computer where Toad Intelligence Central is installed using the Windows credentials that Toad Intelligence Central services have been configured to run under. 2. Open Toad Data Point. 3. Select Help Licensing. Enter a valid Toad Data Point license in the space provided. 	2306

Data connectivity license: Objects from data sources

Table 4: known issues with objects from data sources

Known Issue	Issue ID
Snapshots can be stuck in a permanent 'Running' state following an unexpected event, for example if Toad Intelligence Central stops unexpectedly. While the snapshot is permanently 'Running' the snapshot data cannot be refreshed. <i>Workaround:</i> Restart the Toad Intelligence Central server. Instructions are provided in the <i>Toad Intelligence Central Deployment Guide</i> .	4598

Table 5: Known issues - data source specific

Known Issue	Issue ID
Generic ODBC: Cannot map to a Generic ODBC data source if the DSN contains spaces.	2965
Google Analytics: Mapping tables with start_date and end_date on a where clause have the following requirements: <ol style="list-style-type: none">Acceptable values for start_date and end_date are:<ul style="list-style-type: none">todayyesterday<N> daysAgo (where <N> represents the number of days)YYYY-MM-DD (year/month/day date format)If there is a subquery then the start_date clause must in the innermost subquery. Note that if optimizations are skipped then the start_date and end_date won't take affect.	795
Oracle BI Enterprise Systems: Unknown error occurred while processing the query. The Oracle BI Enterprise Systems data source has timed out on the query. <i>Workaround:</i> Rewrite your query to return smaller datasets then join the results. For example you may want to query data one quarter at a time rather than for a whole year.	2099
Apache Cassandra™: Mapping tables using the CQL (Cassandra Query Language) protocol some columns are not accessible. <i>Background:</i> There are issues around declaring a single column 'statically' in the CREATE COLUMN FAMILY statement, then adding other columns 'dynamically', as discussed in the <i>Mixing static and dynamic</i> section of http://www.datastax.com/dev/blog/thrift-to-cql3 : “the upgrade to CQL3 will be less straightforward than in the case of pure static or pure dynamic column families. Namely, CQL3 still consider the column family static because the definition of [ADDRESS is static]. But since the [other] columns themselves are not declared ... you will not be able to access them for CQL3”	3024

Known Issue	Issue ID
<p>Apache Cassandra: Attempting to connect from Windows machine with IPv6 enabled (which includes, for instance, Windows 7 by default) to an Apache Cassandra server on the same machine using the host name "localhost" fails with the message "Could not connect client socket: Already open".</p> <p><i>Workaround:</i> Connect with the equivalent IPv4 address instead, for example "127.0.0.1".</p>	12763
<p>Apache Cassandra: Databases must be configured to use an Order Preserving Partitioner in order to support range queries on the identifier column.</p>	11518
<p>Apache Cassandra: Mapping tables with dynamic super columns whose names contain dynamic column names is not supported.</p>	11506
<p>Apache Cassandra: Toad Intelligence Central does not support column-oriented tables. Toad Intelligence Central is only able to discover tables in the key-value model.</p>	
<p>MongoDB: For a MongoDB 3.0 (or later) connection, the user must have Read/Write privileges in the MongoDB database in order to view sub-tables (MongoDB embedded documents).</p>	5520
<p>MySQL: Character data not encoded in UTF-8 is truncated at the first non-ASCII character.</p> <p>For example the word Protegé from a column encoded in latin1 is truncated to Protec.</p>	12668
<p>Toad Data Point 4.0 - SAP ASE: In an SAP ASE time type column, fractional seconds might be unexpectedly trimmed from data. This issue was encountered in a data object (snapshot) published from an SAP ASE data source using Toad Data Point 4.0 (or earlier).</p>	QAT-7839

Third party connections to Toad Intelligence Central

Table 6: Known issues using third party connections to Toad Intelligence Central

Known Issue	Issue ID
Third Party Connections require default-character-set=utf8	2048

System Requirements

Before installing Toad Intelligence Central 6.0, ensure that your system meets the following minimum hardware and software requirements.

Toad Intelligence Central server

Ensure your hardware is appropriate for the expected usage.

Table 7: Hardware requirements of the Toad Intelligence Central server host

Configuration	Connected Users ¹	Active Users ²	Logical Processors ³	Memory	ProgramData\Quest Software\Toad Intelligence Central ⁴	Network Capacity
Desktop	20	1 - 5	2	8 GB	500 GB	100 Mbit/s
Small Server	50	6 - 15	4	32 GB	2 TB dedicated data disk or striped over 2-3 spindles	200 Mbit/s
Large Server	100	16 - 30	8	64 GB	4 TB striped over 3-4 spindles	400 Mbit/s

i NOTES:

1. **Connected Users** defines the maximum number of users who may be connected to Toad Intelligence Central at the same time.
2. **Active Users** defines the number of connected users who may be executing queries or publishing objects at the same time.
3. **Logical Processors** defines the number of sockets multiplied by the number of cores.
4. **ProgramData\Quest Software\Toad Intelligence Central** stores user information, data source connection information and mappings, snapshots and datasets. The location of this folder is defined when Toad Intelligence Central is installed. The default location for the folder is \ProgramData\Quest Software\Toad Intelligence Central\.

i **TIP:** For higher numbers of Active Users, disk performance (on ProgramData\Quest Software\Toad Intelligence Central) will improve significantly if the data is striped across multiple spindles to enable concurrent I/O operations. This is especially true when Intelligence Central snapshots or datasets are heavily used.

Table 8: Software requirements of the Toad Intelligence Central server host

Operating System	Windows 8.1 (64-bit) Windows 10 (64-bit) Windows Server 2012 (64-bit) Windows Server 2016 (64-bit) Windows Server 2019 (64-bit)
.NET Framework	.NET 4.7.2 or later is required.
Additional Software	Update for Universal C Runtime in Windows. See KB2999226 or Visual C++ Redistributable for VS 2015 for more information.
ODBC Drivers	To connect to ODBC data sources, supporting ODBC drivers and necessary client files must be installed on the Toad Intelligence Central server host computer. i TIP: If your environment includes Toad Data Point refer to the following section: Working with Toad Data Point.
DB2®	DB2 ODBC driver (included in the Toad Data Point install) DB2 client DB2 catalog
MySQL	MySQL Connector/ODBC 5.1.6
Oracle	Oracle (32 bit and 64 bit): 11g instant client + ODBC supplement OCI client Tnsnames.ora file
SQL Azure	SQL Server Native Client 10.0
SQL Server®	SQL Server Native Client 10.0
Sybase®	Sybase ODBC driver (included in the Toad Data Point install)
Snowflake®	Snowflake ODBC driver 2.24.2 (or later)
Teradata®	Teradata ODBC driver Teradata .Net Data Provider
Other ODBC	32-bit, System DSN

Working with Toad Data Point	<p>Install Toad Data Point on the Toad Intelligence Central server host computer. Toad Data Point is automatically installed when you use the Toad Intelligence Central Installer to install the Intelligence Central server. This ensures compatibility of features and drivers for objects published through Toad Data Point and is required in order for Toad Data Point automation scripts to execute on Intelligence Central.</p> <p>Following installation of Toad Data Point on the Toad Intelligence Central host computer, start the Toad Data Point application and add your Toad Data Point Professional license key. Adding your license key to Toad Data Point is required, however Toad Data Point installed via the Toad Intelligence Central installer is not counted in the Toad Data Point license count.</p> <p>Automation scripts—If executing Automation scripts on the Toad Intelligence Central server, review the following:</p> <ul style="list-style-type: none"> • Email SMTP port—If an Automation Script includes an instruction to send an email then in order for that email to be sent the Toad Intelligence Central server must have access to an email SMTP port. • Microsoft Excel—If an Automation Script includes an instruction to run a macro in an Excel® spreadsheet, then Microsoft Excel must be installed on the Toad Intelligence Central host computer for the macro to successfully execute.
Security	<ul style="list-style-type: none"> • Starting with Toad Data Point 5.5, the TLS protocol v1.2 or above is required for MySQL data sources that use cross-query connections and store data in MySQL embedded hub. • Starting with Toad Data Point 6.0 the TLS protocol v1.2 or above is required when establishing secure connections to MySQL data sources

Toad Intelligence Central Web Server

The Toad Intelligence Central installer installs the Toad Intelligence Central Web Server on the same host computer as Toad Intelligence Central. The minimum requirements of the Toad Intelligence Central Web Server are as follows.

Port	<p>Port 80 is reserved for the web port. During installation, you can change this if required.</p> <p>It is not advisable to install other web servers on the Toad Intelligence Central server host.</p> <p>Ensure the port is open for TCP inbound connection. Ensure the Windows firewall and any other firewalls affecting the Toad Intelligence Central server host allow access to the Web Server.</p>
Web Browser	<p>Access Toad Intelligence Central from any of the following Web browsers:</p> <ul style="list-style-type: none"> • Internet Explorer® 10 (or later). Compatibility View not supported. • Chrome™ browser: latest stable version • Firefox®: latest stable version • Safari®: latest stable version

Data connectivity license - data source connections

A valid data connectivity license supports the following data sources.

Business Intelligence	Google Analytics Oracle Business Intelligence Enterprise Edition 10g, 11g and 12c SAP Business Objects Query as a Web Service (QAAWS) XI 3.0, 3.1 and 4.1 Salesforce SharePoint Lists using Data Services over SharePoint Server 2013 via OData. Also, SharePoint Online. Hive versions 0.10 (CDH 4.2), 0.13, 1.1 (CDH 5.12), 2.1.0. HiveServer2 is supported. SQL Server Analysis Services 2016 OData - Generic for any OData service versions 1, 2, 3 and 4.
Relational	ODBC-compliant databases. <i>See above section on ODBC drivers for details.</i>
Cloud	Azure Table Services Apache Cassandra™ versions 1.0.5, 1.2.3, 2.0.9, 2.1.7, 3.0.5, 3.4, and 3.11.0 Apache HBase™ versions 0.89, 0.90.3, 0.98.6, and 1.2.6 MongoDB™ versions 2.0.1, 2.6, 2.6.5, 3.0, 3.2.4, 3.4.6, and 4.0.0 Amazon DynamoDB Cloudera Impala 2.9.0 SimpleDB

Product Licensing

Toad Intelligence Central is shipped with a trial key that enables a 90 day open trial license to Toad Intelligence Central. Use this key to evaluate Toad Intelligence Central without restriction.

At the end of the 90 day trial, if a Data Connectivity license has not been entered, your access to Toad Intelligence Central will be limited to Toad Intelligence Central Community Edition. Entry of a Data Connectivity license is required to use Toad Intelligence Central with Data Connectivity. Any Toad Intelligence Central license from a prior release can serve as a Data Connectivity license for this release.

Any user can enter a license. Administrator credentials are required to remove a license.

To activate a license

1. From a web browser, log in to Toad Intelligence Central.
2. Select **Administration | Licensing**.
3. Click **Add License**.

Getting Started with Toad Intelligence Central

Upgrade and Installation Instructions

To upgrade, run the Toad Intelligence Central installer (which will launch the Toad Intelligence Central Upgrade Wizard) and follow the instructions.

This release of Toad Intelligence Central has been tested with and supports an upgrade from either of the two previous versions. For example, an upgrade to Intelligence Central 5.0 from either version 4.3 or version 3.3 has been tested and is supported.



NOTES:

- The Toad Intelligence Central Data folder stores user information, data source connection information and mappings, snapshots and datasets. This folder might be affected by the upgrade (file contents and table schemas may be changed in new version). See [Toad Intelligence Central Data Folder](#) for more information.
- Backup your data folder before upgrade in case you needed to roll back to the previous version because of any upgrade failures.
- Beginning with version 5.1.3 you can use the upgrade wizard of Toad Intelligence Central to back up the data folder for you automatically. When an upgrade fails, TIC will auto rollback both the application and data folder.
- Remove the backup data folder when you do not need it anymore. Toad Intelligence Central will not remove it automatically.
- By default, the location of the Toad Intelligence Central Data folder is ProgramData\Quest Software\Toad Intelligence Central\. If you upgraded from Intelligence Central 3.2 (or earlier), the Toad Intelligence Central data folder could be located here: ProgramData\Dell\Toad Intelligence Central.
- To upgrade Toad Intelligence Central from a deprecated operating system, refer to [Upgrade from a deprecated operating system](#).

Additional Resources

To find additional information, read product documentation, and connect with the community, see the following:

- [Product Documentation](#)
- [Toad Intelligence Central User Forum](#)
- [Toad Intelligence Central Blogs](#)
- [Toad World](#)

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Central and Eastern Europe.

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! | **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

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Updated - Tuesday, June 21, 2022
Software Version - 6.0