



Product Documentation

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# **Embarcadero® DBArtisan™**

New Features Guide

Version 2016

1<sup>st</sup> Edition Sept., 2015

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# CONTENTS

What's New in DBArtisan 2016.....	4
PostgreSQL Object Management.....	4
Object Wizards/Editors .....	4
Analyst Explorer Node .....	4
Performance IQ.....	4
Top Instances .....	5
Top Waits .....	6
Top I/O .....	6
Missing Indexes .....	7
ISQL Performance.....	7
Performance window .....	8
ISQL Performance listed in Error Pane.....	8
Team Server 2016 Support .....	8
Team Server 2016 as the Data Source Catalog.....	9
New Data Source Search Button.....	10
Topics .....	11

# What's New in DBArtisan 2016

- [PostgreSQL Object Management](#)
- [Analyst Explorer Node](#)
- [Performance IQ](#)
- [Missing Indexes](#)
- [ISQL Performance](#)
- [Team Server 2016 Support](#)

## PostgreSQL Object Management

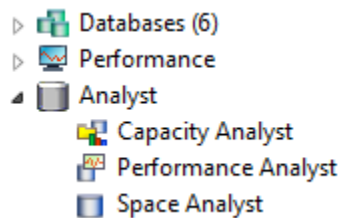
### Object Wizards/Editors

A Wizard and an Editor for **Types** have been added for PostgreSQL: [Types Wizard](#) and [Types Editor](#).

## Analyst Explorer Node

The [Analyst Node](#) of the Explorer provides shortcuts to the License-specific Analyst Series tools. These shortcuts are:

- [Capacity Analyst](#)
- [Performance Analyst](#)
- [Space Analyst](#)



## Performance IQ

[Performance IQ](#) is a feature which gives you statistics about the performance of a dbms. This feature measures different valuable statistics for the users, providing them with a tool to locate and diagnose problematic SQL code and event-based bottlenecks.

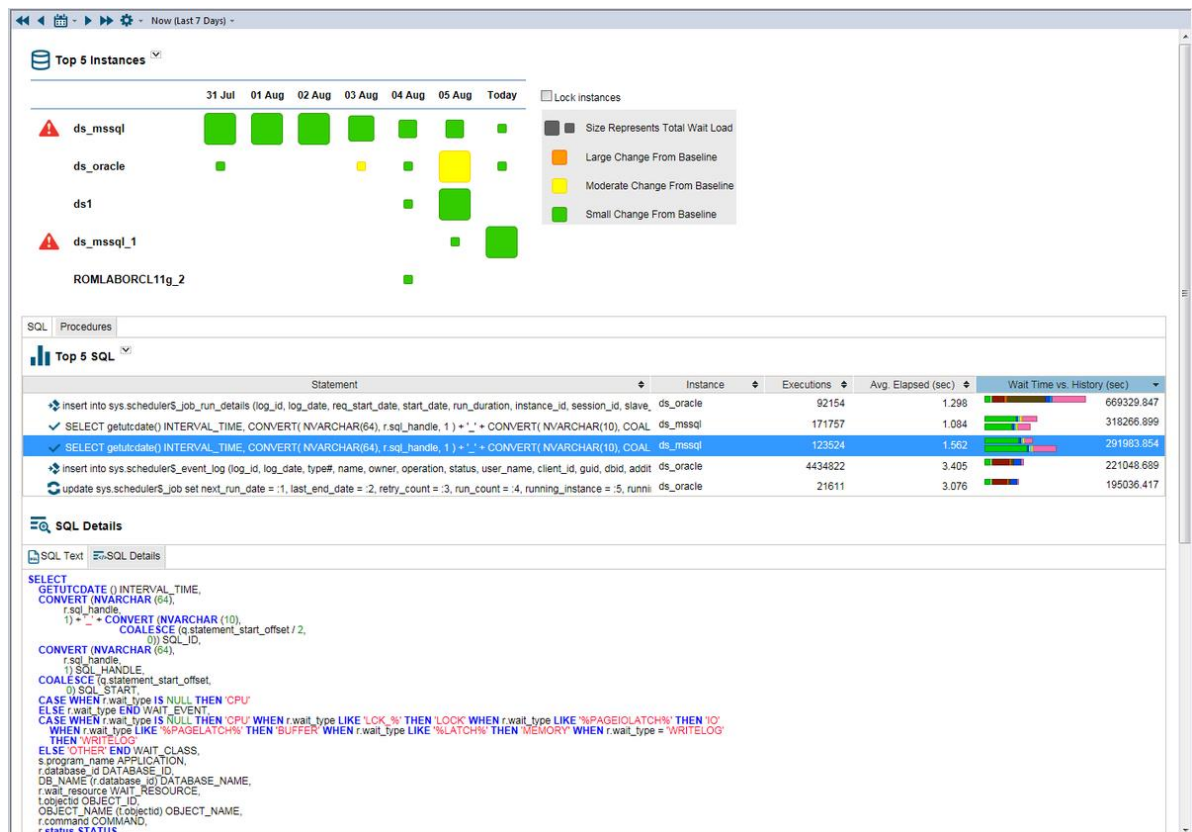
[Performance IQ](#) is based in Team Server 2016 and it includes four main windows which displays relevant information:

- o [Performance IQ - Top Instances Window](#): Gives you statistical information about **Wait Time** per day for different dbms. It helps you to locate and diagnose problematic SQL code and event-based bottleneck.
- o [Performance IQ - Top Waits Window](#): Samples a data source and builds a statistical model of the load on the database based on the **Wait Time**.
- o [Performance IQ - Top I/O Window](#): Presents I/O information based on the **Sankey** diagram and **Throughput vs Response Time** graph.
- o [Performance IQ - Monitoring Alerts Window](#): Lists the **Triggered Alerts** which have been defined before in Team Server 2016.

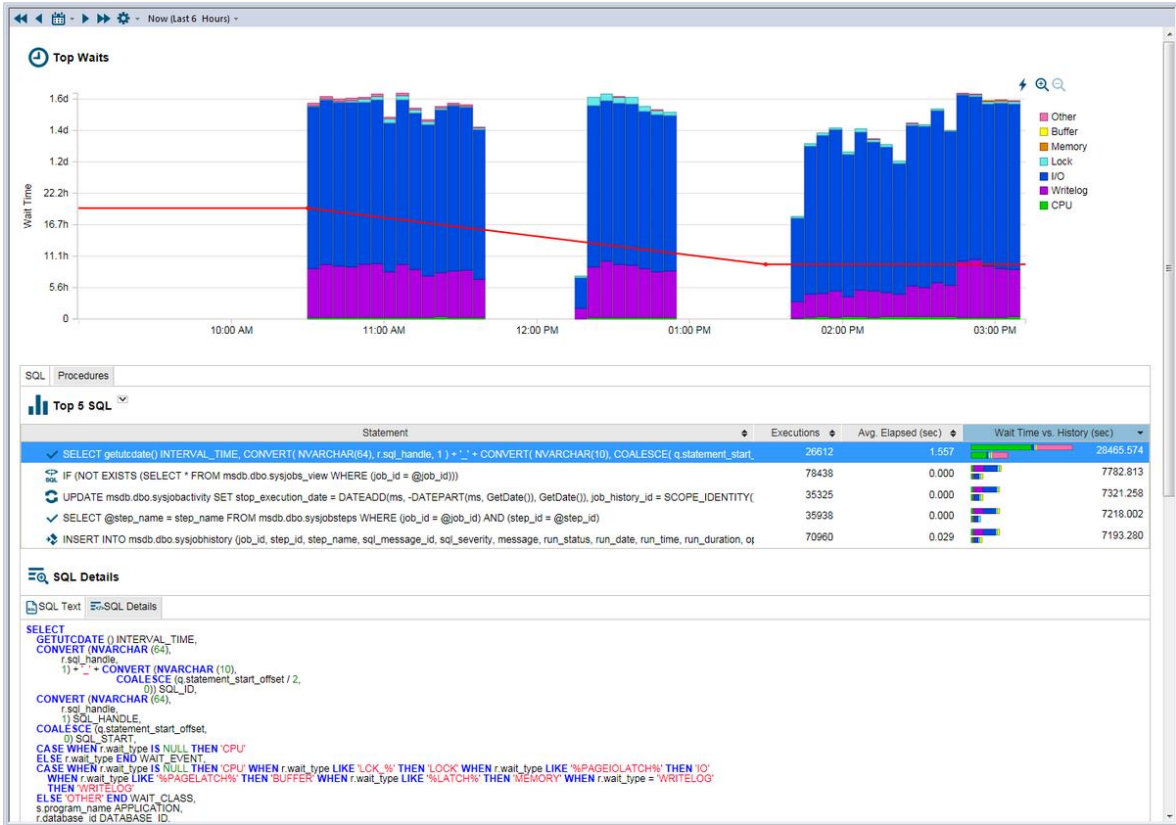
[Performance IQ](#) needs Team Server 2016 to be configured for monitoring datasources. You can find all the information for installing Team Server 2016 in [Install and Configure Team Server 2016 and Repository](#).

**Note:** In this release, Performance IQ only available for SQL Server and Oracle.

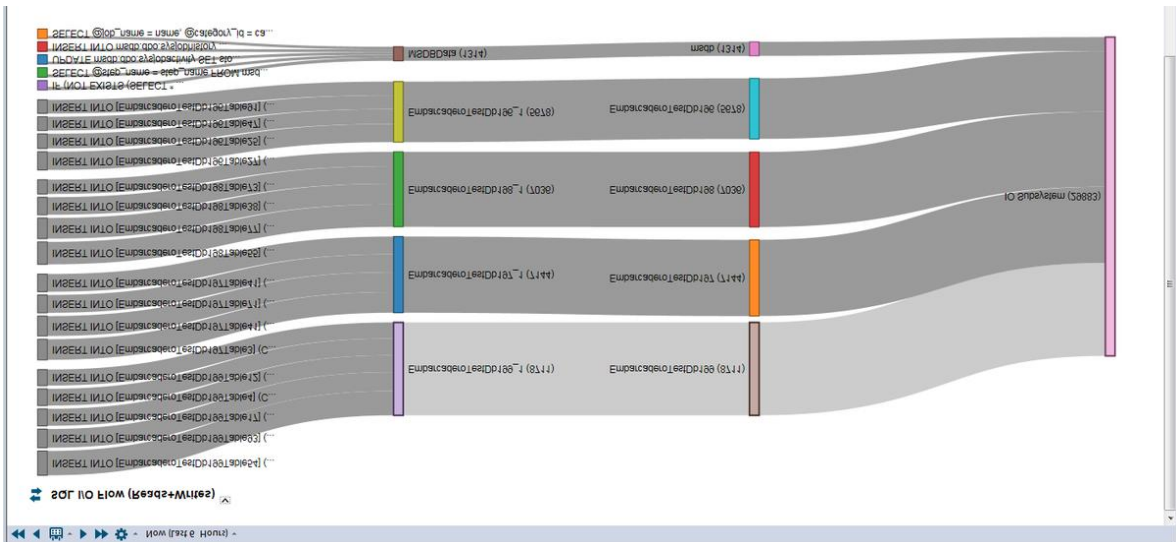
## Top Instances

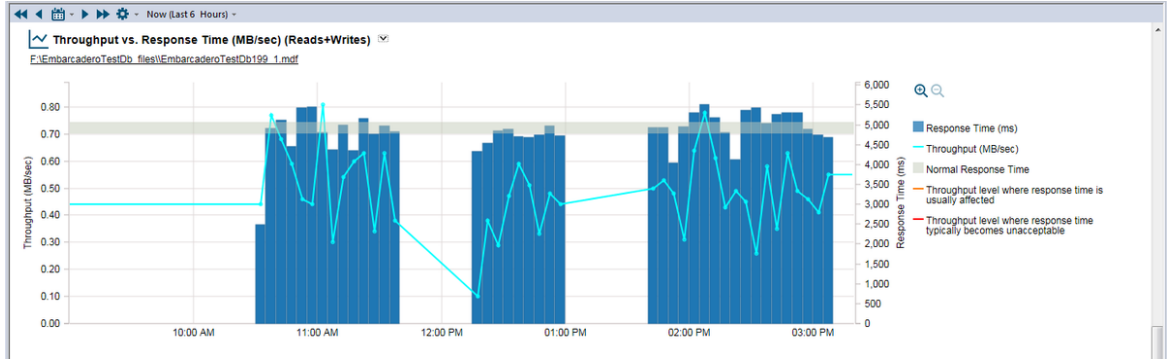


## Top Waits



## Top I/O





## Missing Indexes

The [Missing Indexes](#) feature analyze the system looking for **Missing Indexes** which, once added, would improve the performance.

DBArtisan proposes you some **Indexes** that can be created created after analyzing the system. You can create these **Indexes** by launching the [Indexes Wizard \(SQL Server\)](#) and directly double-clicking the selected **Missing Index**.

Description about how to use and access **Missing Indexes** is in [Missing Indexes \(SQL Server\)](#).

**Note:** [Missing Indexes](#) is only available for SQL Server.

## ISQL Performance

SQL Editor includes new functionalities for SQL Server. In this new release, SQL editor provides information about the SQL statements while you are writing in the [SQL Editor](#). This information is included in a new window as well as listed in the [Error Pane](#).

Information like **Missing Indexes**, **Statistics**, **Overlapping Statistics** and **Recommendations** are displayed in this new window. You can find more information in [ISQL Performance](#)

## Performance window

The screenshot shows the Performance window with the 'Missing Indexes' tab selected. It displays information for the table [dbo].[testmissingindexes2], including a table of index candidates with their total costs and average user impacts. The table contains two entries, each with a recommendation to create a new index.

Property	Value
Total Cost	1549
avg_user_impact	63.13
Recommendation	CREATE INDEX [missing_index_103_102_testmissingindexes2] ON [SILK_TEST].[dbo].[testmissingindexes2] ([Codigo2], [Codigo3]) INCLUDE ([Field1], [Field2], [Field3], [Field4])
Total Cost	1549
avg_user_impact	63.13
Recommendation	CREATE INDEX [missing_index_105_104_testmissingindexes2] ON [SILK_TEST].[dbo].[testmissingindexes2] ([Codigo2], [Codigo4]) INCLUDE ([Field1], [Field2], [Field3], [Field4])

## ISQL Performance listed in Error Pane

The screenshot shows the Error Pane with the 'Performance' tab selected. It lists four performance-related messages for different SQL queries. The messages indicate that performance information is available for tables: SILK\_TEST.dbo.TestMissingIndexes1, trunit.BULK\_INSERT\_TES, and trunitdb.trunit.BASIC\_DATA. The fourth message is a syntax error: 'Encountered unexpected token "SELECTx"'. The SQL queries are listed in the background window above the error pane.

```

1 SELECT * from SILK_TEST.dbo.TestMissingIndexes1
2 SELECT * from trunit.BULK_INSERT_TES
3 SELECT * from trunit.MULTIPLE_RESULT_TWO
4 SELECT * FROM trunitdb.trunit.BASIC_DATA
5 SELECTx * from SILK_TEST.dbo.test2
    
```

Level	Line	Column	Message
Performance	1	15	Performance information available for table: SILK_TEST.dbo.TestMissingIndexes1.
Semantic	2	15	Table BULK_INSERT_TES cannot be resolved or may be hidden by a SQL filter
Performance	4	15	Performance information available for table: trunitdb.trunit.BASIC_DATA.
Syntax	5	1	Encountered unexpected token "SELECTx"

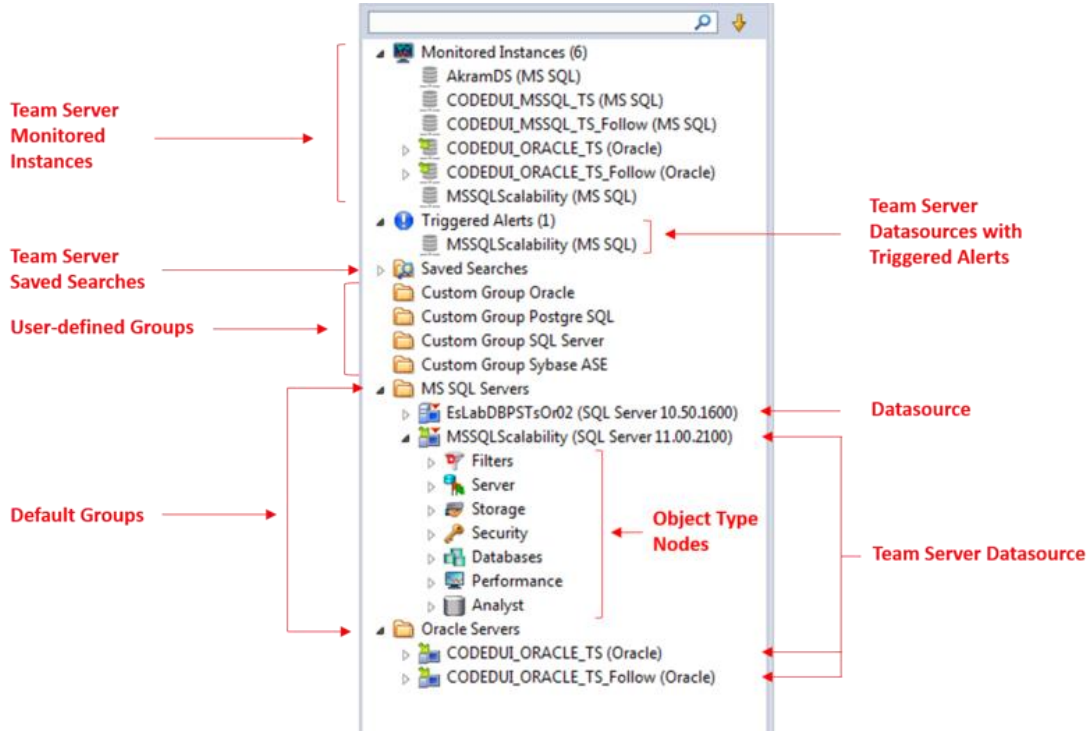
Note:[ISQL Performance](#) only available for SQL Server.

## Team Server 2016 Support

Integration of Team Server 2016 in DBArtisan has been improved. The old **TeamServer Navigator** has been fully integrated into the **Datasource Navigator/Explorer** as well as all the features only accessible from the TeamServer Navigator. For more information, see [Using the Datasource Navigator/Explorer](#) and [Basic Viewing Options in the Navigator/Explorer](#). Notice that when logged in Team Server 2016 using [Performance IQ](#), three new nodes are added:



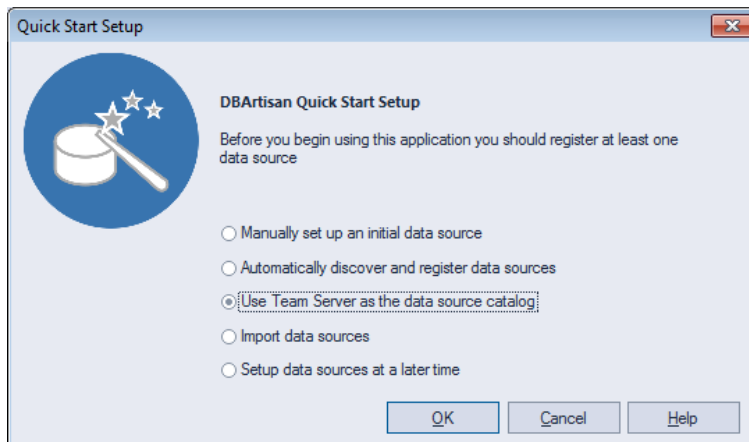
- Monitored Instances
- Triggered Alerts
- Saved Searches



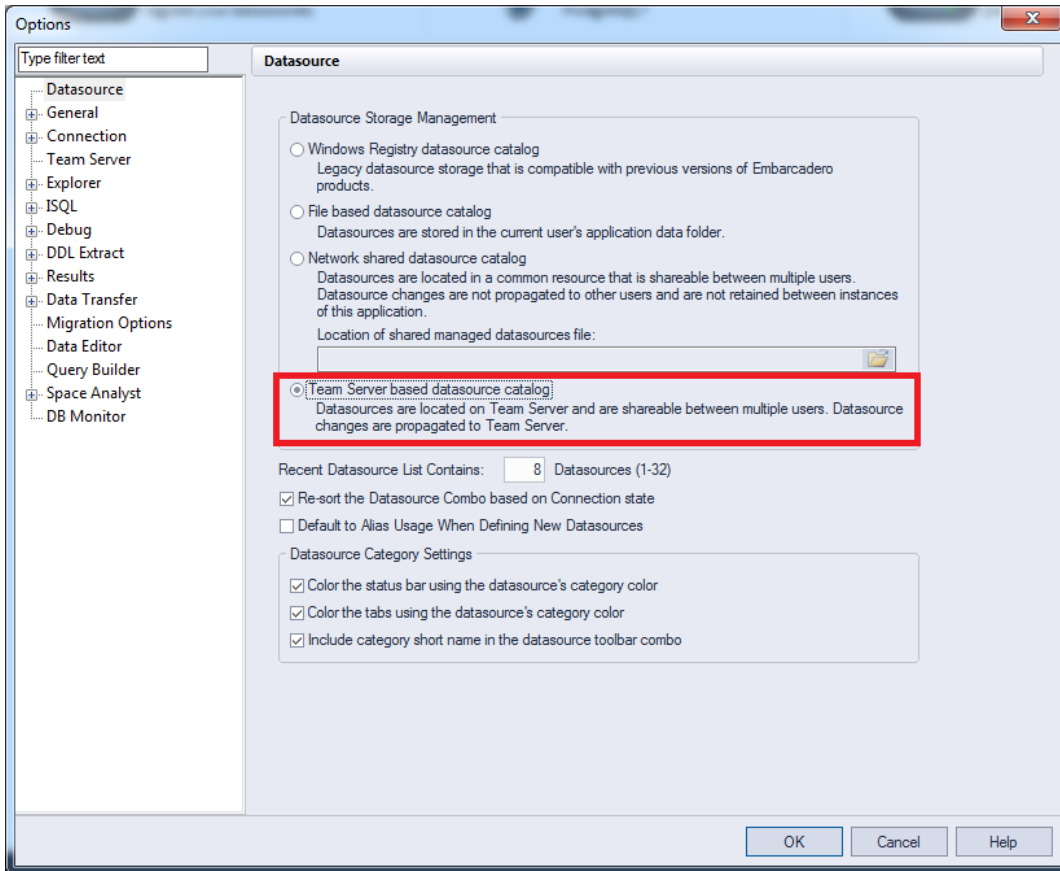
## Team Server 2016 as the Data Source Catalog

DBArtisan 2016 adds the option of registering datasources from the Team Server 2016 Repository. To allow that, new options have been added to [Quick Start Setup](#), and in [Tools > Options > Datasources](#).

In [Quick Start Setup](#), the import of datasources using Team Server 2016 as a catalog has been added.

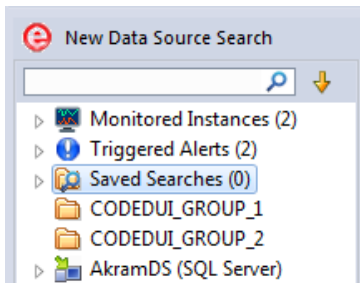


In **Tools > Options > Datasources** the possibility of selecting Team Server 2016 as the source of the catalog has also been added. For more information, see [Working with Team Server 2016 as Datasource Catalog](#).



## New Data Source Search Button

A new button for TeamServer datasource search has been added. This button is located on top of the **Datasource Navigator/Explorer** and it appears only when you are logged in Team Server 2016 and the **Saved Searches** node is selected.



For more information about how to use the **New Data Source Search** see [Searching Team Server 2016 for Datasources](#).

## Topics

- [Release Notes for DBArtisan 2016](#)
- [What Was New in Past Releases](#)