



# Caché 5.2 Release Notes

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# 1

## New and Enhanced Features for Caché 5.2

The following features have been added to Caché for the 5.2 release:

- [Jalapeno](#)
- [Caché Managed Provider for .net](#)
- [IEEE 8-byte Floating Point Support](#)
- [Direct FileMan Dictionary Converter](#)
- [Code Completion in Caché Studio](#)
- [Process-Private Globals](#)
- [Caché Journal File Encryption](#)
- [Version Checking \(and Optimistic Concurrency\)](#)
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- [Free Text Search](#)
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- [Enhanced Debugging Capabilities](#)
- [T-SQL Support](#)
- [Device Level SSL and TLS support](#)

- [Enhanced ECP Performance](#)
- [Enhanced Windows Cluster Resource Management](#)
- [Improved RPM Linux Installation](#)

## 1.1 Jalapeno

Using our traditional object bindings, each client class has, in addition to its developer-defined properties and methods, a set of Caché supplied methods related to object persistence, e.g. Save() and OpenId(). With Jalapeno this paradigm is changed slightly by separating the persistence behavior into a separate "controller" class that can be used with any Java object.

- *Java Object Schema Import*

As part of Jalapeno, we are adding Java Object Schema Import. Traditionally, our approach to language bindings has been to start with a Caché class definition from which Caché generates one or more "projection" classes. Java object schema import turns this around: it enables Caché class definitions to be created from existing Java class definitions.

- *Database Neutral Deployment*

Jalapeno provides an additional feature: the ability to deploy applications on any database supported via the Caché SQL Gateway. It does this by substituting SQL requests for the object mechanisms normally used to link the Jalapeno client with the database (Caché) server. Of course the performance of this approach will be inferior to that of Caché, but it provides a convenient way to construct a database-independent application without giving up the power and performance of Caché.

## 1.2 Caché Managed Provider for .net

The Caché Managed Provider for .net supplies high performance relational and object database capabilities through a single client — something that no one else delivers for .net. This release also provides a Visual Studio .net plug-in that automatically generates .net assemblies from Caché class definitions.

## 1.3 IEEE 8-byte Floating Point Support

Support has been added for IEEE 8-byte floating point (a.k.a. "double") values, making Caché more attractive for calculation-intensive applications.

This enhancement includes:

- A new internal data type for both scalars and list members
- A new intrinsic function to cast a value to a double
- Assembler optimizations to enable Caché to take advantage of processor-specific floating point instructions
- Object and SQL client enhancements to handle new server data types

## 1.4 Direct FileMan Dictionary Converter

The Direct FileMan Dictionary Converter enables Caché table definitions to be automatically created from FileMan file definitions. (Previously, the conversion was a two-step process, from Fileman to F DBMS and then to Caché.)

## 1.5 Code Completion in Caché Studio

Code completion simplifies editing in Caché Studio by enabling developers to pick from a list of context-sensitive choices when entering code. For instance, Studio will assist in specifying a class name when "`##CLASS(...)`" syntax is used, and will assist in specifying a property or method name when the type of a variable is known.

## 1.6 Process-Private Globals

Support has been added for process-private globals. Like local variables, they are accessible only by the process that creates them and are automatically deleted when that process halts. However, like globals they are essentially unlimited in size.

## 1.7 Caché Journal File Encryption

Support has been added for encryption and decryption of Caché journal files.

## 1.8 Version Checking (and Optimistic Concurrency)

At the object level, this feature adds automatic support for version checking. If turned on (via a class parameter) it increments the value of a version number property whenever an object is saved. You can use this set of features to implement optimistic concurrency.

## 1.9 Dynamic Dispatch

Dynamic dispatch enables a Caché class to respond to references to properties and methods that are not part of the class definition at compile time.

## 1.10 Free Text Search

Support has been added for indexing and searching textual data, specifically:

- A new %Text data type.
- A new SQL selection operator, %CONTAINS.
- Language-specific parsers for English, Spanish, French, Italian, German, Japanese, and Portuguese.
- Support for multi-word ("n-gram") indices. For instance, with an n-gram length of 1, all individual words are indexed. With an n-gram length of 2, all word pairs that occur together are also indexed.
- Support for "stemming" to map multiple forms of a word (go, goes, going, went, ...) to a common root.

- Noise word filtering, to eliminate common words (a, and, the, ...) from an index.

## 1.11 ODBC Multiple Result Sets

Support has been added to Caché ODBC for stored procedures that return multiple result sets.

## 1.12 WMI Support

Support has been added for Windows Management Instrumentation (WMI), the Microsoft implementation of Web-Based Enterprise Management. This enables Caché to be monitored by a variety of Windows management tools, including Microsoft Management Console.

## 1.13 Enhanced Debugging Capabilities

Caché debugging capabilities have been enhanced in a number of areas:

- Ability to debug macro routines, class definitions, and CSP files
- New system-level mechanism to make the debugger connection more robust
- New stack trace mechanism
- Ability to BREAK into a READ
- Additional debugging commands / options.

## 1.14 T-SQL Support

A number of capabilities have been added to simplify migration from SYBASE or SQL Server to Caché, including support for the T-SQL language in stored procedures. T-SQL is currently supported on 32 bit Windows, 32 bit Linux (RedHat and Suse distributions), 64 bit AIX, and 64 bit Solaris.

## 1.15 Device Level SSL and TLS support

Device level support has been added for secure sockets layer communication using SSL 2, SSL 3, or TLS.

## 1.16 Enhanced ECP Performance

Improvements have been made to ECP and the ECP/jrnsync mechanism to enhance performance and scalability.

## 1.17 Enhanced Windows Cluster Resource Management

This enhancement enables Caché to be managed more easily in a Windows cluster.

## 1.18 Improved RPM Linux Installation

A new RPM install package has been created for Caché on Linux.