



EPICOR
Silver Partner

Epicor 9 and ERP 10 Technical Comparison



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Introduction

Epicor ERP version 10 represents a new technology age not only for Epicor, but for ERP systems in general. The main reason Epicor invested roughly \$25 million to build ERP 10 was to dramatically simplify the solution—architecturally and from an operations viewpoint. Epicor believes customers will appreciate how Epicor ERP is much easier to manage and that performance is much improved. The product re-architecture will allow Epicor to accelerate the overall product release cadence.

Generally, many ERP application functions—for example, orders, invoices, jobs, and inventory management—do not radically change year over year. But that is not the case with the business and technology environment most Epicor customers find themselves facing today. Technology changes very rapidly, and ERP users are always looking for new ways to access and leverage ERP as well as share insights with others. ERP 10 reduces the number of “moving parts” that make up the product framework, which in turns will ensure the product stays on the forefront of enterprise technology.



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Simplicity

ERP 10 services are hosted purely using Microsoft Windows® components, including Internet Information Services and Microsoft .NET. An all-new management architecture makes deployment and migration much easier.

Mobility

Touch-enabled devices are now supported for a new navigation system and a re-architected Epicor Web Access (EWA) browser client.

Collaboration

Epicor Social Enterprise is included with ERP 10 and is a new way for ERP users to interact with each other and with ERP data.

Choice

ERP 10 can be deployed on premise, hosted, or access via subscription. It is also much easier to create high-performing virtualized infrastructure.

Over 500,000 hours of effort went into creating ERP 10 and the Epicor Development Team migrated over 18 million lines of code to the new platform. But critically, existing Epicor ERP functionality designs, database structures, programming models and the user experience features—with a few exceptions—remain the same. Keeping the product design essentially untouched has two benefits. First, users do not

require any retraining because the product look and feel is the same as with Epicor 9 (only faster). Second, keeping the product design pegged to Epicor 9 enabled Epicor to deliver ERP 10 much faster and Epicor could reuse most existing testing protocols and automated testing tools.

Epicor ERP 10 delivers a higher performing and more reliable system that is easier to use and manage. ERP 10 is optimized for Microsoft SQL Server, which itself has become a mission-critical platform for managing enterprise data and providing insights and decision support tools. Along the way, ERP 10 and ICE 3 bring new capabilities like touch enabled navigation, a re-architected Epicor Web Access, Epicor Social Enterprise, re-architected Business Activity Queries, and new Business Process Management features.

The project to Build a New Platform

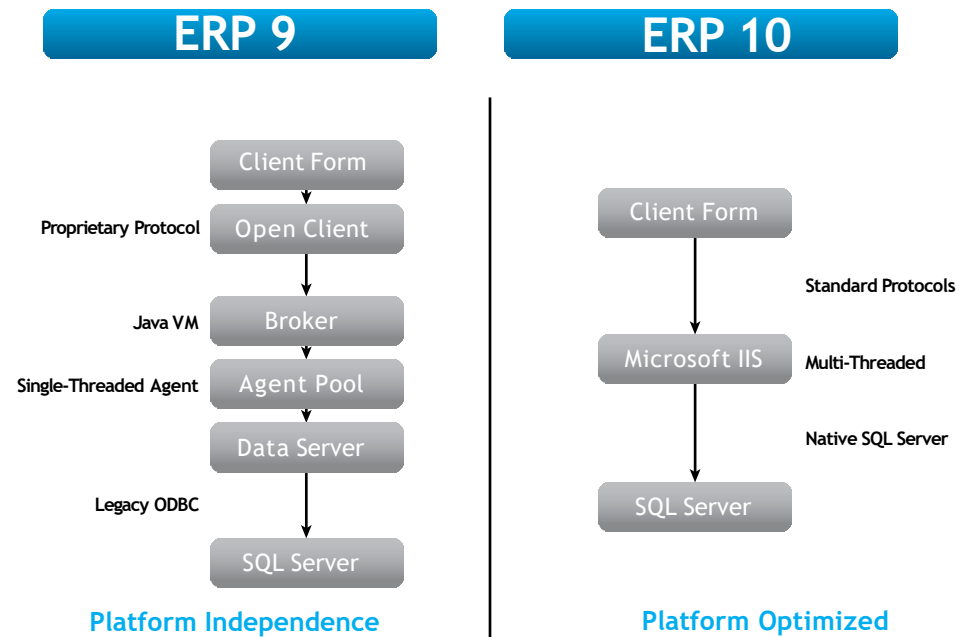
Epicor was among the earliest adopters of Microsoft .NET, building an all-new services platform around the .NET Framework version 1 in 2002 for the Epicor for Service Enterprises solution. Epicor again adopted Microsoft .NET to re-architect its Vantage® ERP Smart Client during project “Sonoma”, which was released in 2005 as Vantage 8. The result was a system with supreme usability and a multi-layered customization framework that is among the leaders in the industry to this day. Both projects were recognized by Microsoft and the ERP industry as groundbreaking efforts. Epicor was also seen as an industry bellwether by proving the .NET Framework was ideally suited for enterprise applications.

While the Vantage 8 ERP Smart Client was built on Microsoft .NET technology, the server platform was built using Progress® OpenEdge®, which is an application platform coupled with a high-performance embedded database. The OpenEdge platform provides platform independence—the freedom to write an application once and then run it on many server operating systems and database technologies—and has certainly provided solid reliability to Epicor customers for many years. But platform independence is no longer essential in the ERP systems marketplace. Also, combining components from multiple technology vendors complicates the product architecture. To drive growth and achieve its technology roadmap, Epicor needed to build its own highly-specialized framework using fewer 3rd-party dependencies.

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In 2007, Microsoft released a new version of the .NET Framework that included version 3 of Microsoft's innovative C# language. C# 3.0 included language-integrated query constructs, popularly known as LINQ (not to be confused with "Microsoft Lync Server", which is a conferencing and messaging server). Epicor immediately realized that C# 3.0 made it possible to map Epicor's ERP programming model to the C# language. A research project was launched to determine how a .NET based framework for ERP should be architected, how well it would perform, and overall project feasibility.

Generally, many ERP application functions—for example, orders, invoices, jobs, and inventory management—do not radically change year over year. But that is not the case with the business and technology environment most Epicor customers find themselves facing today. Technology changes very rapidly, and ERP users are always looking for new ways to access and leverage ERP as well as share insights with others. ERP 10 reduces the number of "moving parts" that make up the product framework, which in turns will ensure the product stays on the forefront of enterprise technology.



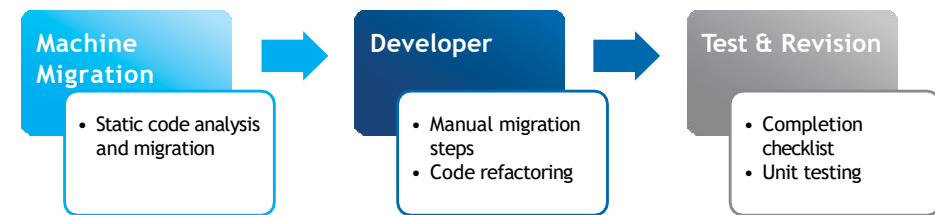
Platform Differences: ERP 10 compared to Epicor 9

Epicor 9 and ERP 10 Technical Comparison

Parallel projects were defined to (1) create the optimum architecture on .NET and (2) create tooling to assist with the migration of the Epicor 9 server code. The code migration approach was to use a static code analysis and migration tool for first pass conversions and “by rote” construct conversions. Developers would then evaluate each of the 18,000 files and finish the migration process by hand-coding the final code version.

Again, this approach worked well because the overall design of Epicor ERP functionality was left unchanged. In 2010, Epicor went to Microsoft’s Redmond, Washington campus to stress test the initial ICE 3.0 framework and to conduct a number of architectural reviews. The ICE 3 Framework was being designed around the as yet unreleased .NET Framework version 4, and Microsoft was keen to see how the Epicor project was progressing. The ICE 3 architecture was finalized in 2011, which meant the code migration process could begin running at full speed.

Another key difference between Epicor 9 and ERP 10 is that the ICE Framework was completely severed from the ERP code branch. Although ICE and ERP development has always been managed independently, both products have always been delivered together and there was no way to deliver ICE without having some unnecessary ERP application elements in tow.



Epicor 9 and ERP 10 Technical Comparison

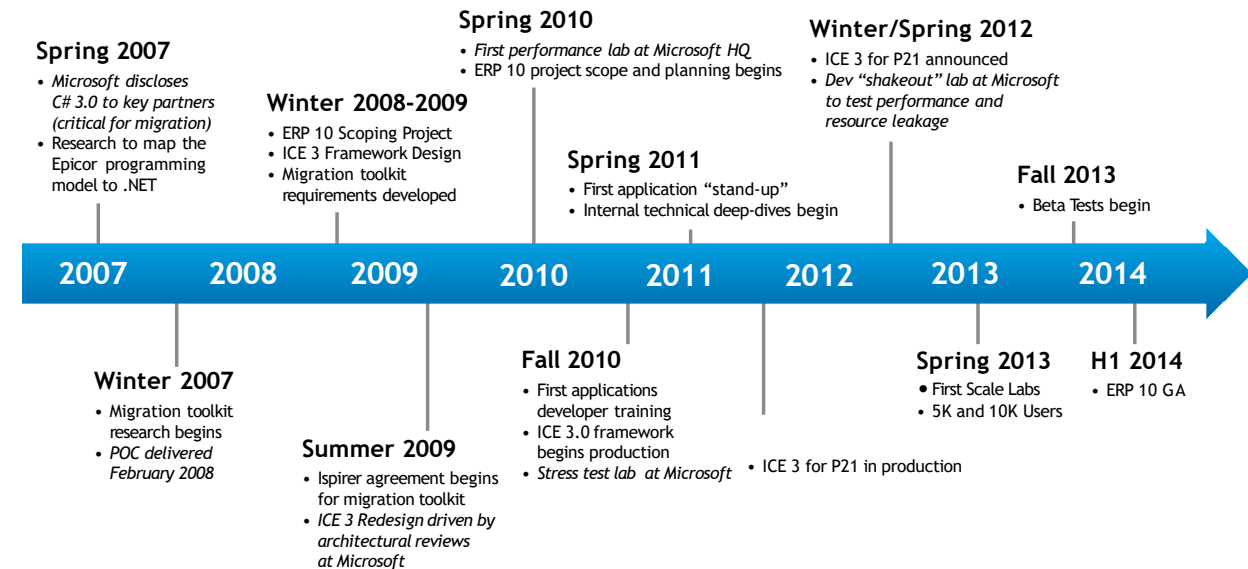
A fully independent ICE Framework—called ICE 3.0 Extend—was released in 2012 for use by Epicor customers running the Prophet 21® distribution suite. ICE 3.0 Extend allowed Prophet 21 users' access to ERP technologies familiar to Epicor 9 users, like business activity queries (BAQs), dashboards, Epicor Mobile Access, and Enterprise Search. Over time, ICE was made available to Epicor Eclipse and iScala® customers. More importantly, this strategy to release ICE independently means ICE 3 has been “in the wild” and used by live customers well before the release of ERP 10.

By 2012, performance objectives had been met and proven and a large number of complex ERP services, like Order and Job Management—had been through the migration process. Epicor once again took ERP 10 to Microsoft's lab in Redmond to review how the architecture was performing and to make sure no resource

leakage was occurring. The lab engagements also served to prepare Epicor for scale testing events which were conducted in the spring of 2013.

In the fall of 2013, ERP 10 was released to customers participating in the beta test program. The ERP beta test program was more rigorous than previous major release projects. Over 75 customers were selected based on global region, functionality usage, and the size of the deployment (users). The criteria for releasing ERP 10

required many of these customers to be running ERP 10 live—and through at least one month end process. In addition, there could be no known high-severity bugs.



Performance

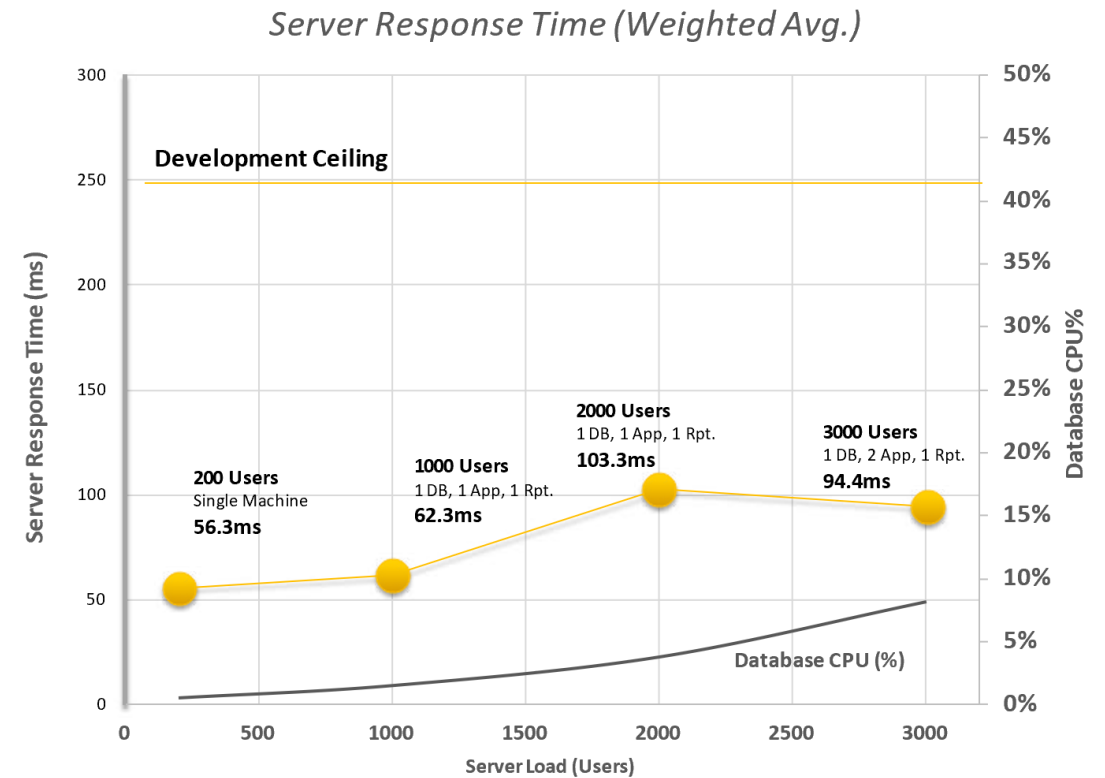
Generally speaking, Epicor ERP 10 performs twice as fast (as observed by users) and scales about four times better than Epicor 9. Better efficiency also means ERP 10 can run on less expensive hardware. There are three aspects to Epicor performance testing: absolute responsiveness as perceived by users running the Epicor Client Application, server processing times under various load models and finally throughput testing which demonstrates how typical bulk load operations perform. Epicor development guidelines mandate that a service pack or release may not perform worse than a previous product version, as measured by our standardized tests. This mandate governs even when functionality is added to the system.

The Epicor approach to scale testing is simple: be accurate and report results truthfully. Comprehensive load testing is complex and expensive. Epicor invests in load testing to understand how our products perform and how to make them better. We also publish detailed results to provide our customers with the best information to help plan capacity and system responsiveness. Epicor ERP 10 scale testing has been performed for interactive loads from 200 to 3000 users and Epicor has conducted throughput testing for distribution business scenarios.

Performance

Epicor ERP 10 shows good linear scalability from 1 users through 3000 users. More importantly, database server utilization remains very low—never exceeding 10% CPU utilization. SQL batch requests at 3000 concurrent users averaged about 6,940 per second, which reflects about 12% of capacity for typical hardware of no more than 4 requests per second per user, well under Epicor guidelines.

Interactive load tests are modeled using real-world Epicor ERP logs collected from live customers who are primarily manufacturers and/or distributors. The test results above are from a manufacturing model tested at 200, 1000, 2000 and 3000 user levels. Note that each load test is conducted on hardware consistent with Epicor recommendations. For example, the 200-user test was conducted on a single machine. For the 1000 and 2000 user tests, a database server, application server and a reporting server were used. At 3000 users, an additional application server was added as a load balanced cluster.



ERP 10 Server Response Time 200 - 3000 Users

Performance

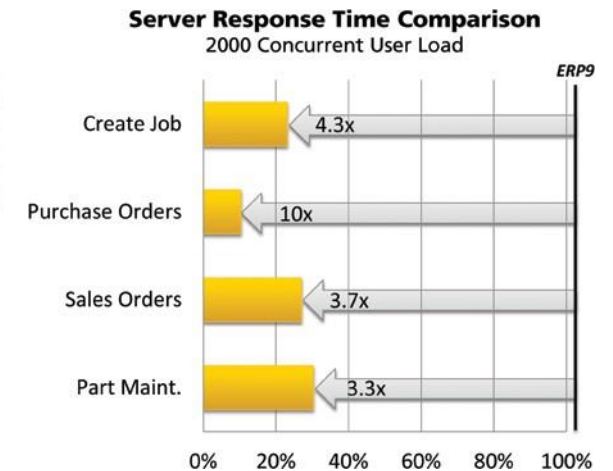
Epicor throughput tests are designed to allow customers to model integration capacity. Initial tests conducted on a beta release for Epicor ERP 10 show good

throughput numbers in order and shipping transactions which are typically automated for distribution scenarios. The results shown here were demonstrated on a single-machine solution. All three tests were running simultaneously. Note that conditions for data loads vary widely and much higher throughput may be possible when the systems and integrations are tuned to match the business requirements.

Generally, Epicor ERP 10 performs twice as fast as our Epicor 9 product and scales more than four times higher. Achieving high performance for large numbers of concurrent users with Epicor 9 required rigid adherence to infrastructure requirements, especially in scale-out (multi-machine) deployments with SQL Server. Epicor ERP 10 server processing times 2-5 times faster than ERP 9 server response times. Some aspects—notably Business Activity Queries—can be one or two orders of magnitude faster. Most server performance gains are the result of massively reducing the number of SQL Server batch requests.

Epicor is constantly measuring the performance characteristics of Epicor ERP. Microsoft Windows Server and SQL Server platforms make optimizing ERP 10 product performance easier because these products are very well instrumented. Performance testing is now even more endemic to all areas of Epicor because measuring resource impact through unit tests, standardized performance tests, and load testing have become integral parts of the tooling and practices that make up the Epicor development process.

Transaction	Per Hour
Order Lines	62778
Invoices	74658
Shipments	34662



General Performance and SQL Impact: ERP 10 compared with Epicor 9

System Requirements

The ERP 10 Client Application is also based on Microsoft .NET Framework and will run any version of Windows—other than Windows RT—supported by Microsoft. Windows XP is not supported for the ERP 10 Smart Client. At least 1GB of available memory is recommended for running the ERP 10 Smart Client. For Epicor Web Access, the Mozilla FireFox®, Apple® Safari®, Google Chrome™, and Internet Explorer® 9 (and later) desktop browsers are all fully supported.

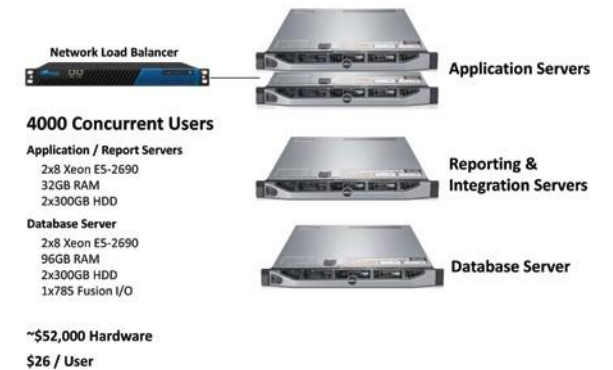
Hardware configurations for ERP 10 are fully explained in the Epicor ERP 10 Hardware Sizing Guide. A single machine server can be scaled up to support around 200 or more concurrent users. Guidance for a 200-user system includes a 2x8 (16-core) Intel® Xeon machine with 96GB RAM and an I/O accelerator (like Fusion-io) for SQL data storage. For scale out configurations, typical application server hardware includes 16 cores, 32GB RAM, and HDD storage. Database servers require similar hardware, although Fusion-io and 96GB RAM are both recommended. Scale out configurations have been tested to 3000 concurrent users using one database server and three application servers (one dedicated for generating reports).

Epicor REP is fully compatible with VMware® and Hyper-V® virtualization technologies. See the Epicor ERP Guide to Virtualization for details and best practices. Implementers need to pay special attention when virtualizing the database server to avoid performance issues caused by slow I/O performance.

Single Machine Configurations



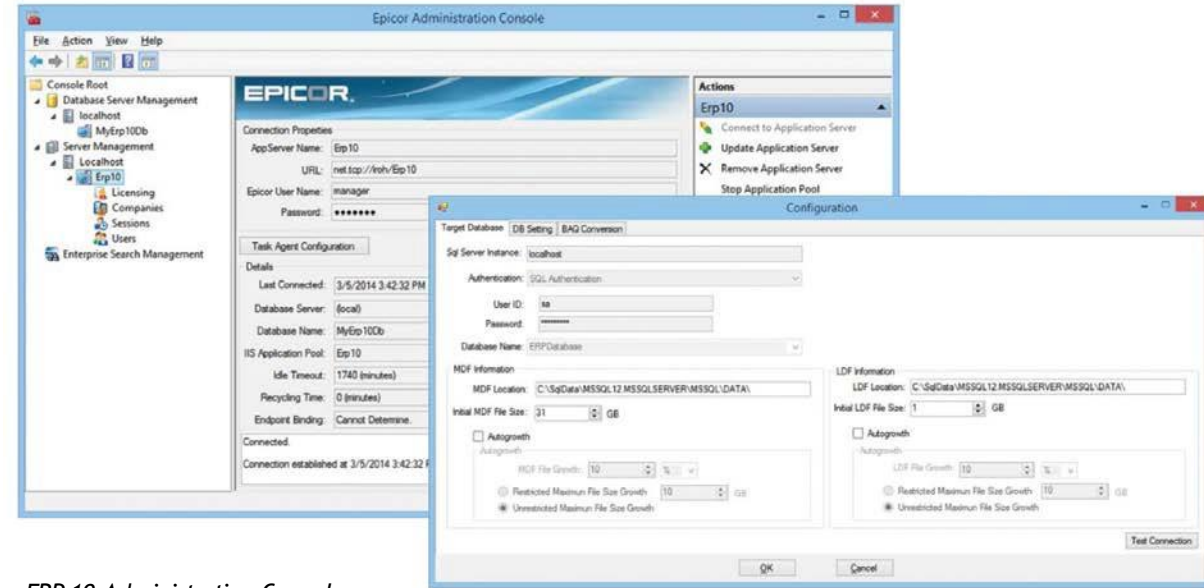
Scale Out Configurations



ERP 10 Hardware Cost Effectiveness

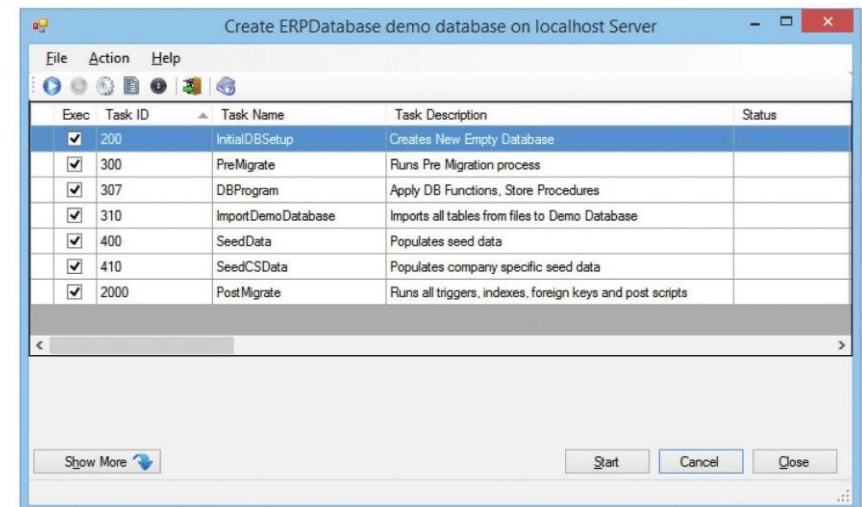
Deployment and Management

An all-new deployment and migration framework was built for Epicor ERP 10. There is a now a dedicated deployment system within the ERP 10 Administration Console which has been separated from the installation process. SQL Server database deployments are managed using T-SQL scripts executed from the administration console, eliminating the need to install any Epicor product components on dedicated SQL Server machines. Database administrators can also control the size, growth and file group locations for database being created during deployment or migrations.



ERP 10 Administration Console

A new database migration framework executes conversions and updates to databases much more efficiently. Operations that can run in parallel are allocated to multiple execution threads. The system also allows administrators to execute preparation and validation tasks as a data health check prior to attempting any actual conversions. The database migration process has a new user interface which allows administrators to see what steps have been executed and to see the migration log entries as they are created.

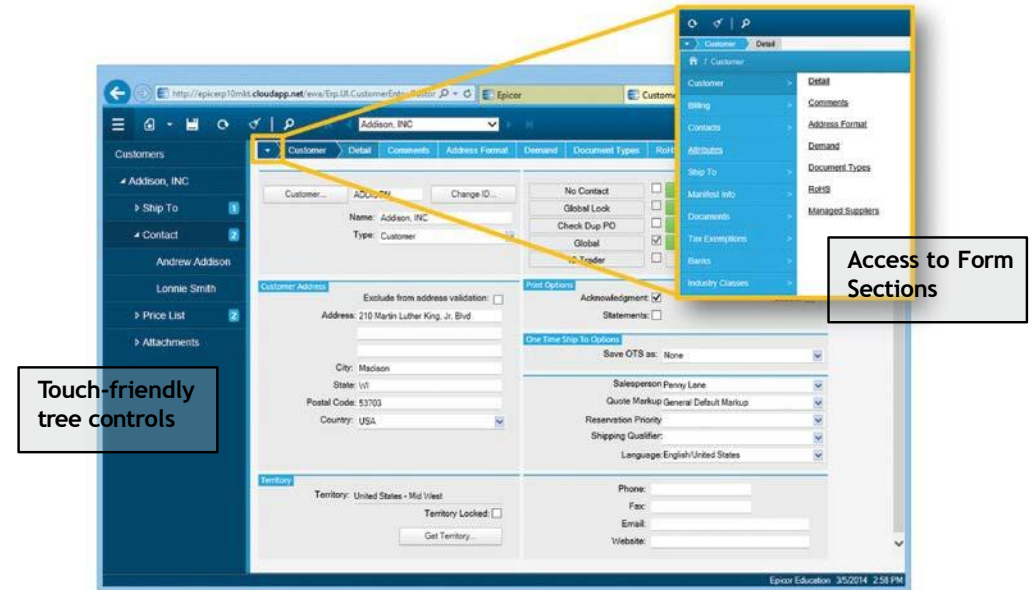


ERP 10 Database Migration Monitor Screen

Epicor Web Access (EWA)

Epicor Web Access has been enhanced to dramatically improve performance and usability. EWA for Epicor 9 faithfully recreated the Smart Client form layouts, but the result was difficult to use on touch enabled screens. For ERP 10 EWA changes many form elements for better usability and to make more screen area available for data.

Epicor Web Access can be deployed on the same web server as the ERP 10 services—no dedicated server or web site is required.



Epicor Web Access for ERP 10

Epicor 10 Home Page

The ERP 10 Home Page is an all-new touch-enabled environment that combines dashboards and navigation. The Home Page allows users to create highly personalized ERP experience by defining live tiles representing ERP information, external resources, and ERP navigational links. Live tiles can be driven by Epicor business activity queries (BAQs), analytical views from Epicor Performance Management (EPM), as well as feeds from Epicor Social Enterprise. The ERP 10 Home Page also features searching—either externally through Bing® or internally through ERP menus or Enterprise Search.



Epicor ERP 10 Home Page and Search Screen

Epicor Social Enterprise

Epicor Social Enterprise (ESE) is a new collaboration technology included in Epicor ERP 10 base product. ESE provides an easy way for ERP users to form one or more communities around an area of interest or ERP information. Users “follow” the people, subjects, and ERP information that interests them. ESE displays messages created by users or the ERP information system as one or more “activity streams”.

Users can form conversation groups around common areas of interest. Or they can choose ERP artifacts like customers, parts, suppliers, and production orders to follow. Epicor Social Enterprise stores conversations about trading partners and internal operations and lets users contribute messages or research interactions about ERP information in context with application forms.



Epicor Social Enterprise Activity Streams

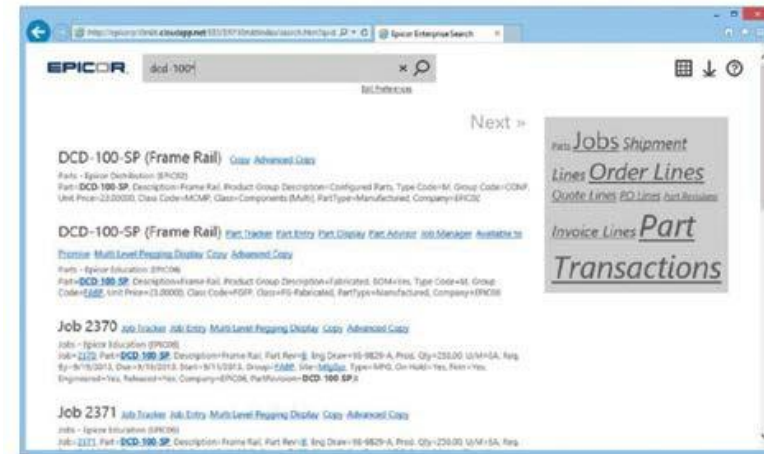


Epicor Social Enterprise Notifications

Epicor Enterprise Search

Enterprise Search has been available for several years as an optional companion product for Epicor 9. For ERP 10, Epicor has added a basic version of Enterprise Search to the base product, which comes with a set of predefined business activity queries (BAQs) which are indexed. Customers can also purchase an advanced version of Enterprise Search, which allows administrators to add their own BAQs for indexing and provides more control of the output format and other options.

For ERP 10, Epicor Enterprise search no longer requires any database table replication. All indexing can occur directly using the production database.



Epicor Enterprise Search

Internet-style search

- Wildcards
- Dates and numeric values
- Indexed Business Activity Queries (BAQ)
- Hot-Key add on for desktop apps

SQL Optimized

Epicor ERP 10 was architected specifically for the Microsoft Data Platform, including Microsoft SQL Server and Microsoft .NET Framework. Optimizing the product for SQL Server was a prime objective in the design of ERP 10 because the efficiencies gained provide dramatic benefits to performance and scalability. Another objective was to ensure administrators could use easily use SQL Replication Server to replicate data, which means Epicor will no longer provide its own replication system.

SQL Server administrators will appreciate many of the changes ERP version 10 brings to physical SQL Server databases. For example, all tables have declared primary keys, a GUID-based alternate key (tagged with the SQL Server “rowguid” extended property), and a rowversion (timestamp) column for tracking changes since previous points in time. All string data is stored as Unicode and other data types previous cast as character types have been migrated to intrinsic SQL columns types (e.g., bit, unique identifier). All Epicor tables are assigned to a SQL schema name—generally “Ice” or “ERP”—which helps ensure Epicor table names do not conflict with tables belonging to customers, partners, or other parties.

Column Name	Data Type	
Company	nvarchar(8)	Company partition value
ClassID	nvarchar(4)	
Description	nvarchar(30)	
BuyerID	nvarchar(8)	Declared primary keys
RcvinspectionReq	bit	
CommodityCode	nvarchar(12)	
AvailForReq	bit	Character data is Unicode
MitBurRate	decimal(7, 2)	
SplitPOLine	bit	
NegQtyAction	nvarchar(4)	
PurchCode	nvarchar(8)	
ConsolidatedPurchasing	bit	
GlobalPartClass	bit	Versioning column
GlobalLock	bit	
SysRevID	timestamp	
SysRowID	uniqueidentifier	Alternate key (rowguid attribute)

ERP 10 SQL Server Tables



Database Tables

- ~290 Systems Tables, 644 Indexes
- ~1660 ERP Application Tables, 6460 Indexes
- ~1900 Data Sync Suspension Tables



Transactions

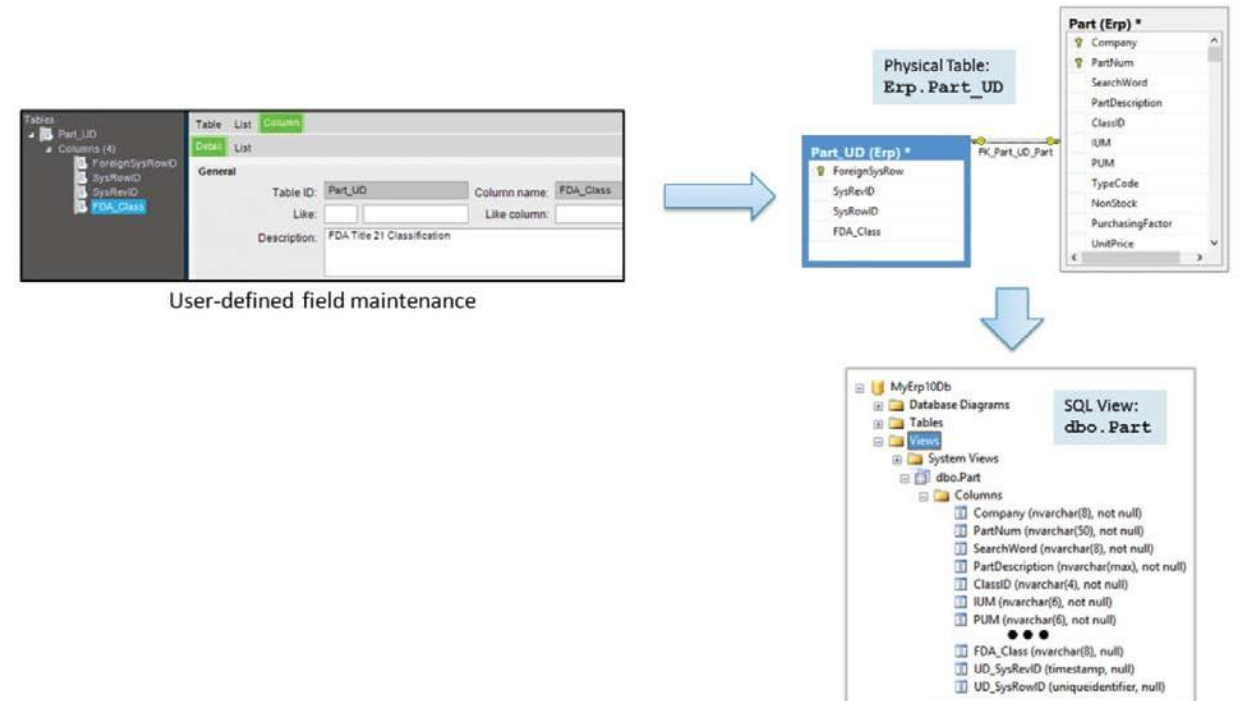
- Snapshot isolation eliminates share locks on reads
- Exclusive locks are generally row-based
- Change data capture available on all tables

SQL Optimized

Epicor ERP 10 leverages stored procedures to execute complex queries that drive most standard service operations like GetList(), GetRows(), and GetById(). All stored procedures are generated by the Epicor ICE software development kit (SDK) specifically for optimizing queries and efficiently paging results. ERP 10 does not use stored procedures for executing business logic.

Epicor 9 tables included a large number of columns pre-allocated and reserved for customer or user-defined purposes with names like “Checkbox1, Checkbox2, etc.” Those pre-allocated columns outnumbered the actual baseline product columns by a ratio of 3 to 1. The sheer number of pre-allocated columns in the Epicor 9 database—which outnumbered the baseline column count by 3 to 1—potentially caused performance issues for high workloads.

Epicor ERP 10 stores user-defined data in separate tables, only creating user-defined columns specifically declared by administrators. During migrations from Epicor 9 systems, user-defined fields are automatically declared in ERP when detected in the source Epicor 9 data tables. For convenience, ERP 10 creates a SQL view in the dbo schema that combines the baseline and user-defined columns into a consolidated result.



How User-Defined Fields Work in ERP 10

Business Activity Queries

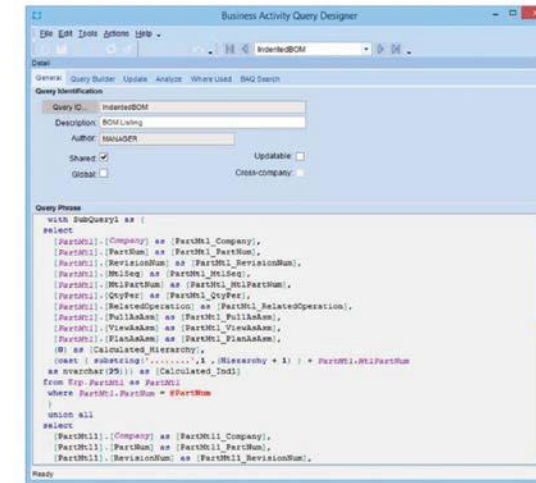
Two foundational capabilities of the Epicor ERP architecture are Business Activity Queries (BAQ) and the ICE Dashboards. As their names imply, a BAQ defines a data query and the ICE Dashboard renders that query on any number of devices. The usefulness of these two technologies is hard to overstate. Many ERP 10 system rely on BAQs for defining relevant data for searching, monitoring, or for use in integrations.

For ICE 3 and ERP 10, business activity queries have been re-architected and optimized for Microsoft SQL Server. All BAQ query constructs are mapped directly to T-SQL. In addition, T-SQL subqueries are fully supported, including common table expressions, UNION, and EXCEPT queries. BAQs also allow multiple result sets, which means header and line-item data can be retrieved in a single BAQ execution. BAQs also will perform much better, especially when calculated fields and complex table joins are involved.

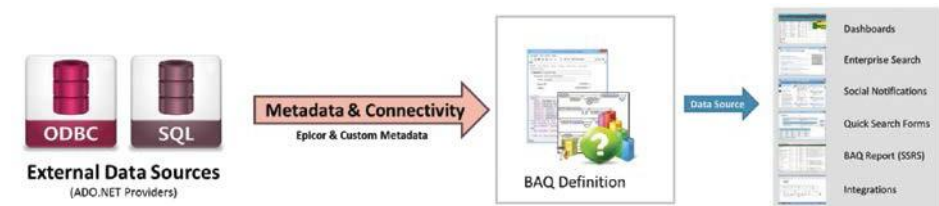
Any updatable BAQ can be a two-way integration API and a first-class resource for Epicor's service orchestration engine, Epicor Service Connect. And new for ERP version 10, BAQs can be defined for non-Epicor data sources via ODBC. Administrators can add metadata that provides useful definitions, documentation, and linkage hints for users defining External BAQs.

Native T-SQL BAQs

- Exclusively T-SQL Constructs
- Multiple Result Sets
- Subqueries (CTEs, UNION, EXCEPT)
- Recursive Queries
- Table-valued function (TVF)
- Higher Performance



Business Activity Queries

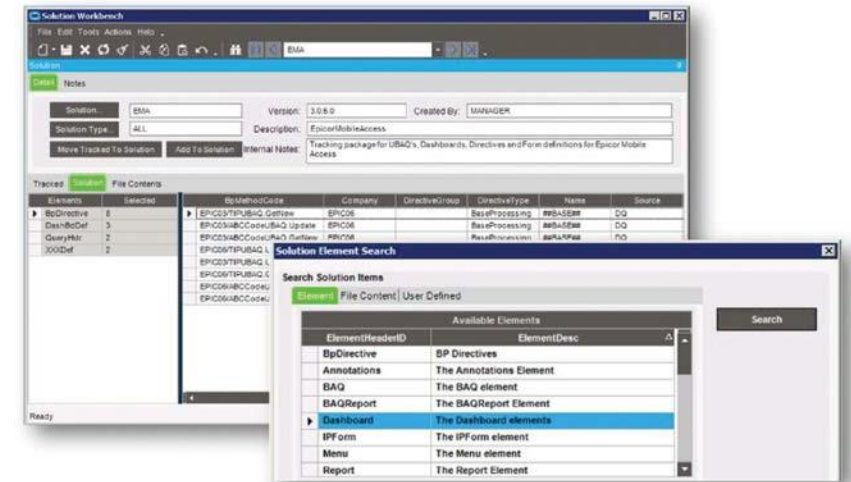


External Business Activity Queries

Tools and Customization

Epicor ERP 10 includes the Solution Workbench—a major redesign of the Epicor 9 Solution Manager. The Solution Workbench defines projects where items can be added and versioned. Solutions are then packaged and can be exported to share with other ERP instances or simply shelved until needed.

Not only does the Solution Workbench help you keep projects organized, but Epicor ERP 10 has an embedded solution tracker. When solution tracking is enabled, Epicor ERP will keep track of anything that gets created and automatically adds the item to the active solution. The ERP 10 Solution Workbench is a great improvement over the Epicor 9 Solution Manager. Many kinds of artifacts can be added to a solution—whether it is an ERP 10 object or an external resource. Usability and performance have improved, especially for managing larger, more complex projects.



Epicor ICE Solution Workbench

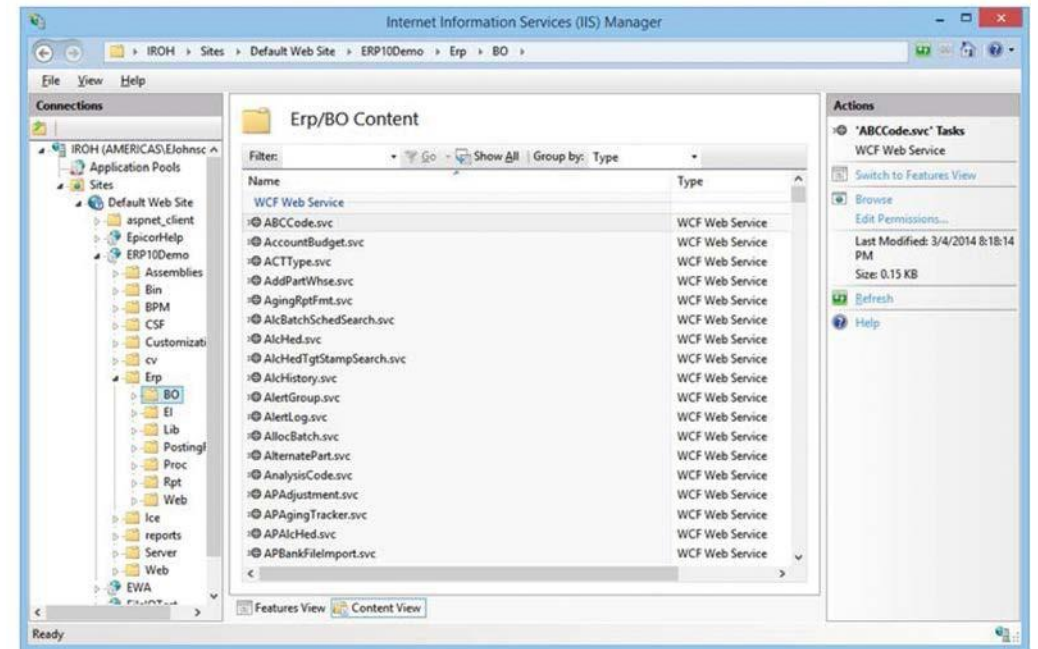
Hosting Epicor ERP 10

Epicor ERP version 10 services are hosted by Microsoft Internet Information Services (IIS) which is delivered with every edition of Microsoft Windows. IIS is an extremely robust, secure application server that is widely used for hosting both public and internal applications. Sourcing IT staff with IIS skillsets is also easy and there are many management and monitoring tools available to help maintain applications hosted using IIS.

ERP 10 is hosted in an IIS virtual directory and executes in application pools managed by IIS. ERP 10 services are fully multithreaded, which means a single host process can be used to service any number of simultaneous service calls. It is recommended that administrators use at least two host processes (web garden) to provide higher availability should a crash of some sort occur. Also having multiple host processes eases the impact of recycling events.

ERP 10 application hosts can run in low-privilege accounts; however care must be taken to ensure the application pool has sufficient access right for SQL Server (if accessed via a Windows credential) and some file system areas required for storing generated code and other resources.

All Epicor ERP 10 services are exposed as Windows Communications Foundation (WCF) service hosts. Each service host opens three input endpoints for receiving incoming call requests. The ERP 10 Smart Client communicates with ERP 10 services using (by default) the NET.TCP protocol, which is a binary protocol coupled with a specialized and compressed data format that provides very high performance and uses low bandwidth.

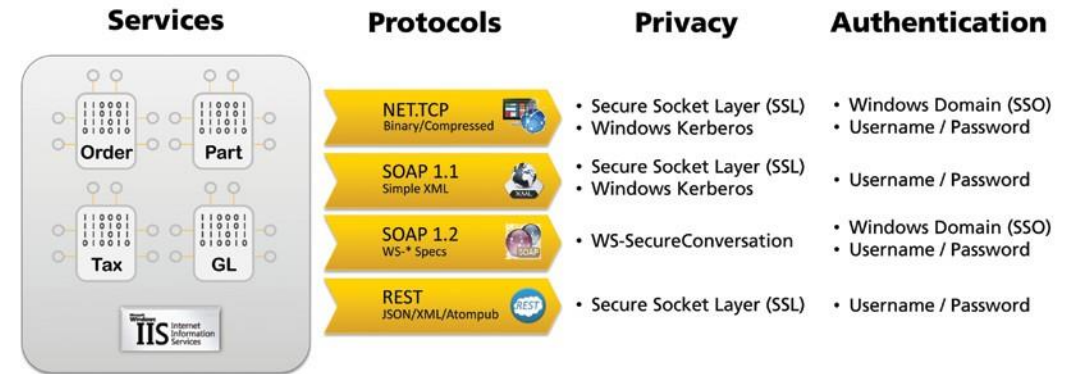


ERP 10 Services Hosted in IIS

Hosting Epicor ERP 10

Two SOAP endpoints are also enabled by default for each application service. The first endpoint uses SOAP 1.1 over HTTP/S, which allows callers to use a very simple XML format for invoking service operations. The SOAP 1.2 endpoint uses web service specifications like WS-Secure Conversation to securely call ERP 10 services over a standard HTTP connection. Finally, ERP 10 includes some limited REST services over HTTP/S which are very useful for integrations and data access.

Service calls are managed by the ICE Framework and the Windows Communications Foundation, which together form an execution pipeline that securely and quickly executes the applications code. Each service is wrapped by a façade to ensure any BPM directives are correctly executed. The ICE Framework also includes a high-performance query delegate cache that accelerates the speed of database queries and reduces the impact of service calls on SQL Server.



WCF Endpoints supported by ERP 10

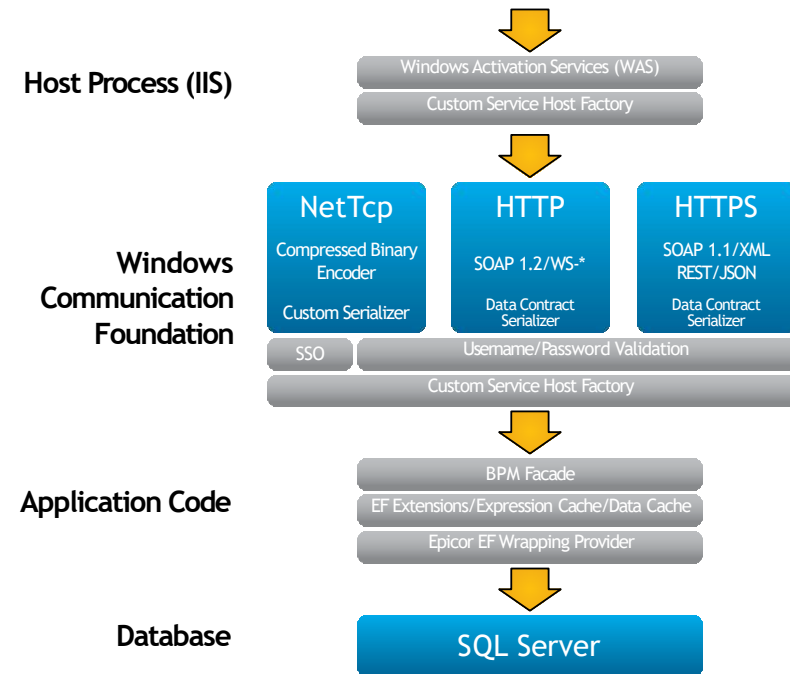
Hosting Epicor ERP 10

ERP 10 includes a rich new tracing and profiling capability that replaces the Vantage 8 / Epicor 9 application server log file. There are a number great improvements to ERP logging administrators will appreciate.

- Logging can be enabled or disabled for specific areas solution
- Changing log settings no longer requires restarting the application server
- The log file has many new features for tracking SQL Server and program execution

One key new logging capability is server log tunneling using the ERP client trace facility. The client tracing options dialog has a new option that incorporates the server log entries with the client trace. This allows administrators to troubleshoot issues from a specific user's interactions.

Service Call Execution

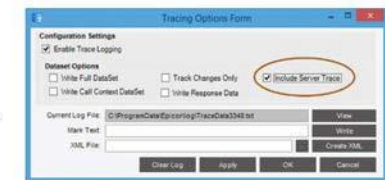


ERP 10 Service Call Execution

```

<tracePacket>
  <businessObject>Ice.Proxy.Lib.SessionModImp1</businessObject>
  <methodName>GetSolutionID</methodName>
  <returnType>System.Void</returnType>
  <localTime>10/12/2013 18:57:33:1944722 PM</localTime>
  <executionTime>0</executionTime>
  <parameters>
    . . .
  </parameters>
  <serverTrace>
    <Op Utca="2013-10-13T01:57:33.1944722Z" act="Ice.Lib.SessionMod/SessionModSvcContract/GetSolutionID"
    dur="4.6457" cll="feB0::ed5b:995:e9fb:3fd3X10:34054" usr="manager" tid="33" pid="2968" xmlns=""></Op>
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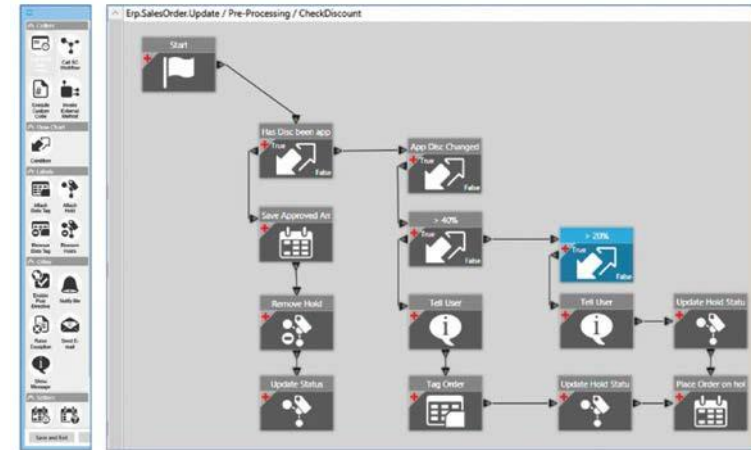
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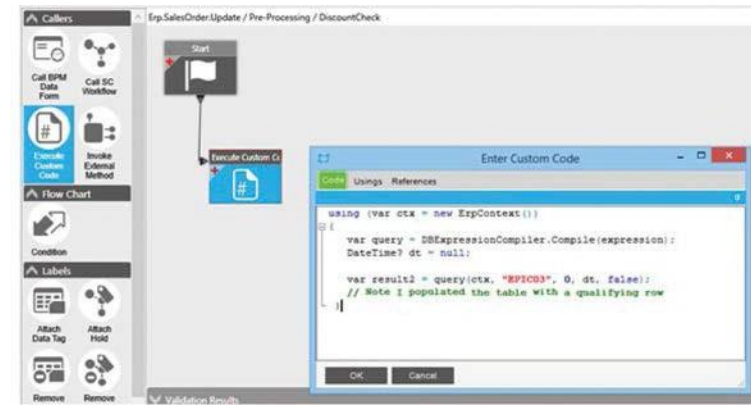
Business Process Management (BPM)

Epicor Business Process Management has been enhanced in two major areas. First, BPM directives can be created using an all-new designer surface. The BPM Designer is coupled with class BPM rules editing to provide a visualization of the directive flow.

Custom code directives are no longer written in ABL—they are now written in C#. The BPM Designer includes a C# code editor and also allows developers to include references from external assemblies. For larger directives, developers can write code in a development environment like Microsoft Visual Studio®, which can then be called from a custom code snippet.



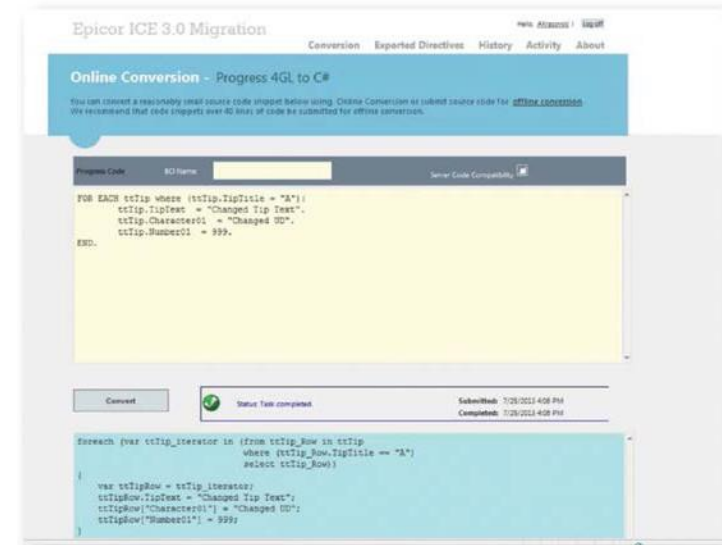
Graphical BPM Designer— All New for ERP 10



BPM Custom Code Directives are written in C#

Business Process Management (BPM)

For customers migrating from Epicor 9 to ERP 10, most custom code directives can be migrated from ABL to C# using a migration tool available online. The Epicor ICE 3 Online Conversion tool allows eligible customers upload ABL code segments used in BPM directives and converts them to equivalent C#. The resulting code quality is generally good but should be reviewed by an administrator before deployed into a production ERP 10 system.

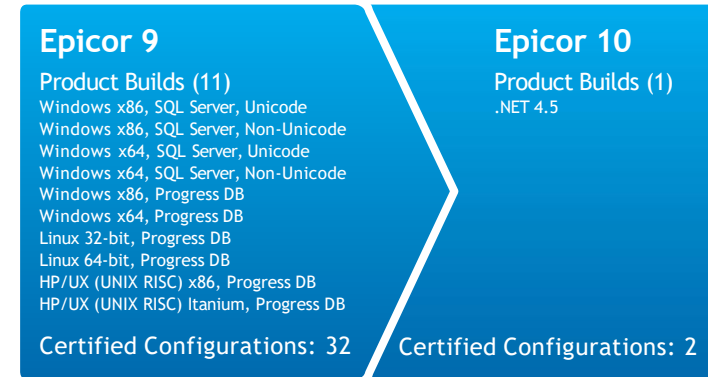


Epicor Online ABL to C# Conversion Service

What ERP 10 Means for Epicor

Epicor has a long view of how ERP systems will evolve over the next decade. Simplifying the architecture is a critical step toward achieving this vision. The first priority was to create a system that would delight our customers—easier to install and manage, not to mention much higher performing and hardware efficient. ERP 10 reduces the number of product builds and platform combinations from 11 down to one, which dramatically reduces the amount of release and regression testing effort required to bring new capabilities to market. It also reduces some of the burden for the Epicor Product Support, Custom Solutions Group (CSG), and Professional Services teams.

ERP 10 takes dependencies on Microsoft .NET Framework 4.5 and Microsoft SQL Server 2008 R2 or later. Application services can run on any version of Windows that supports .NET 4.5 and the ERP 10 database can exist on any version of Windows that is compatible with SQL Server 2008 R2 or later. However, Epicor has only certified—meaning conducted complete platform testing protocols on two typical combinations (see the System Requirements section above for details).



Epicor Product Builds: Epicor 9 compared to ERP 10

Conclusion

Epicor ERP 10 is an amazing example of how software architecture is supposed to work. Epicor was able to completely replace the application server code and build all new technology stack without having to redesign the product. In the process, performance was doubled, scalability quadrupled, and the cost of hardware is significantly reduced because of efficiencies gained in SQL Server and IIS. The result is an ERP system that also can be much easier to deploy and manage. It is also more reliable and easier to troubleshoot than its predecessor. Epicor ERP 10 is overall a much more competitive product and is very amenable to public cloud deployments and virtualized environments.

Epicor ERP 10 first and foremost was built to satisfy customers. But ERP 10 also enables Epicor to begin a new era of product development. The cadence of new products and capabilities produced by Epicor can increase because the development overhead—especially for platform testing—has been reduced significantly. Epicor can also adopt new versions of the Microsoft stack components as they are released, rather than having to wait for multiple platform vendors to coordinate support. Finally, Epicor now has the necessary means build more the ICE Framework using code created by Epicor. That in turn makes it easier to improve products and create new capabilities across all of our product in much shorter timeframes. All of this is possible because software architecture matters, and Epicor has great architects.

Thank you



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