

How is it different from building an application using visual studio for dot net or any visual java development tool?

The basic difference is the amount of programming that needs to be done is significantly reduced. Reasonably complex applications ERP, CRM, HMS, HCMS, etc can be built without writing programs in any programming language. However, fundamental database and SQL (select statements) Knowledge is necessary.

Storing business processes as data will provide an additional advantage of having tools to bring out process dependencies and flow pictorially. This will increase control on the application and also make it responsive to changes.

Coding may be needed only for bridging with other applications or devices.

Hence, there will be considerable effort reduction in the overall ALM.

How many process structures can there be in a system?

There can be any number of process structures in a system. A process structure can also have relationship with many other process structures.

Can the process server be deployed on a Linux or Unix server?

The current version is available for deployment only under a MS Windows 2003. A Java based process server will be made available by end of March 2009 which can be deployed on any open servers.

What kind of skill is required to create an application on a process server?

Apart from domain knowledge a good knowledge on database and SQL statements is the basic skill required for building applications on a process server.

The know-how on using Axpert stem is also needed. However, the Axpert Stem is a simple GUI driven intuitive tool that may not need very extensive training on using it. The tool can be mastered in a few days.

Can the data in an available database be re-used?

The data available in the database in other tables can be re-used just by using SQL statements. SQL can be attached to any data element in a structure or can be used to populate data into the structure. Hence, data available in the same database can be re-used without any additional effort.

How can it interact with other applications?

The process server publishes all its application functionality as web services. So, any external application can read data from the process server using its web services. Functionality of other applications can be executed from the structures by making web service calls.

Standard interoperation with all productivity tools like XL, Word, PDF are provided by default in Axpert. These can be integrated at any level and to any screen.

Table structures are published to enable end users. So, any other external application can also do a data level integration with Axpert.

Standard importing and exporting routines are provided into any screen where data is input from XML and CSV files.

The enterprise version also comes with an exchange server that can do scheduled data exchange. The data format for exchange is XML.

Is it not better to use off the shelf products instead of creating process on a process server?

Wherever standard products fit the business process, using them will be a better choice. However, if the product needs deep customization then it is better to go the process server way. This is because deep customization will consume a lot of time and effort and will also render the product less responsive to changes.

Moreover, business processes that are rules driven and the ones that change quite frequently will be better if defined as process structures because of the high maintainability guaranteed by the process server.

How reliable is the Axpert process server?

The Axpert server has been providing results in 150 plus customer sites for varied purposes. 35 of these are end to end solutions and are business critical. Some of them are very large enterprises that belong to the Indian government. The process structure driven method has been delivering results for the past 3 plus years without any problem.

All the companies that own the process server did not go in for another solution after putting the process server in place. All business processes have been built as structures on the Axpert server.

How secure is the process server?

The data and the process structures are stored within the database server. So, the security is as high as a database server. The process server itself is a set of web services that are deployed under a web server. Hence, all the security policies that are applied on the web server apply to the process server too.

The data transfer over the wire can be made secure by using HTTPS instead of HTTP.

The process server allows creation of user roles. The access control on every structure can be defined for every role. Users can be assigned to roles. So, unauthorized access to the structures is blocked by the process server. The users, roles and their passwords are also stored in the database. The passwords are stored encrypted using md5 algorithm. Hence, the application and the data are very secure.

Does it support HTTPS?

Yes, it does support HTTPS.

How many concurrent users can it support?

The number of concurrent users depends on the web server and database server configuration. The process server is deployed under the web server. In case the concurrent users access need to be increased, more web servers can be added along with the process server and a routing can be put in place.

So the capacity of the process server is governed by the configuration of the web server.

How can an application built on a process server be migrated to other technologies?

An application is built as a set of process structures. These process structures can be viewed using the Axpert Stem. All the business rules and the flow are part of the structures and hence the complete application can be viewed using the Axpert Stem.

Moreover, the process structures are stored in XML format in the database. So, even without the help of the Axpert Stem, these can be used to migrate to other technologies.

The effort involved will be the same as seeing an application developed in one programming language to another.

In what domains can applications be built on the process server?

The process server is domain neutral. Applications can be built for catering to any business process in any domain. This is because a process structure (the central piece in the application) is an extrapolation of table structures that can be used across domains.

Can a portal be built on the process server?

No a portal cannot be built using the process server. It is not intended for doing it. However, the process server can provide the structures within containers (iframes) that can be embedded into any portal. Hence, this feature can be used to link enterprise to web portals.

How is work flow handled?

A status based work flow can be defined as part of process structures. The status field can be updated based on different rules and additional actions can be attached to the status. For example when the status changes may be a mail needs to be sent. These are defined as actions within the structures.

How is access control implemented?

The process server allows creation of user roles. The access control on every structure can be defined for every role. Users can be assigned to roles. So, unauthorized access to the structures is blocked by the process server. The users, roles and their passwords are also stored in the database. The passwords are stored encrypted using md5 algorithm. Hence, the application and the data are very secure.

Can record level access control be implemented?

Record level access control can be implemented as part of access control. That is for every role, the access to transactions that satisfy a given condition can be set. This will provide very high level security on transactions.

Can field level access control be implemented?

Access to every data element in a structure can be controlled based on role. When a user logs in and access a structure, depending on the role assigned to the user the access is governed by the process server.

How can process structures be integrated with SAP?

Bridge programs need to be written that consume web services from the process server and call the API provide by SAP to do the integration. This can be done on a case to case basis. However, the future versions will have a standard connector to SAP.

Can external devices be integrated with the process server?

Web services that integrate with external devices can be attached to the process server. These can be made part of an action associated with a structure.

Can SMS be sent from an action in a structure?

Web services need to be written to send SMS through a SMS modem. These services can be called through an action associated with a structure.

The future versions will have a native task that will integrate with an SMS modem.

How to implement an approval system?

An approval system is defined as a status based work flow. A field is introduced in the structure to hold the document status. Depending on the business rule and the role of the user logged in the status is changed. This is done by defining an action in the structure that needs the approval flow.

How to connect to crystal reports?

A VB program can be written to print using crystal reports and can be run as a web service. The data from the process server can be got through web service or by connecting directly to database and using SQL statements.

Can the application developed on a process server be integrated with an existing portal?

The process server can provide the structures within containers (iframes) that can be embedded into any portal. Hence, this feature can be used to link enterprise to web portals.

How are applications deployed to end customers?

The process server is deployed under the web server. The process structures are copied from the development server using export option and imported into the database in the productions server.

How are applications tested?

Applications can be tested just like a coded application. However, an extensive test on the functionality provided by the process server need not be done because it is already tested. The functionality of only the structures need to be tested.

How is up gradation managed?

Upgrades to process structures can be done on site or can be done off site and imported into the database server any time. However, before every deployment of new process structures a thorough test is suggested.

Upgrades to the process server are needed only for making technology extensions. When this is done, the server is re-deployed onto the production server. However, a sanity test of the application may be needed after upgrading the process server. In case the process server changes the data format of the process structures, those are done automatically.

Is the customer vendor locked?

The customer is not vendor locked because the complete application is stored in the data base in XML format. The table structures that are created by the process server are transparent. So, any time an application that is built on the process server can be migrated to other technologies.

New processes or changes to existing process structures can be made without the help of vendor if the customer possesses the license for Axpert STEM. In fact possessing the Axpert Stem will empower end customer to the extent that there will be no dependency on the vendor.

Moreover since the process server is a set of web services, it allows high degree of inter operability and there is no need for depending on software vendor to provide hooks to other applications.

Are there any bench marks for the claim on reduction in development time?

Yes, we have done proof of concepts comparing the development time on the process server against bespoke development. Our claim is based on such case studies.