Introduction to Software Development on Netigma

Software Development on Netigma

Chapter 1- Architectural approach

This article aims to give a general idea to software developers. These ideas will be most useful when creating the general architecture, creating a particular usage and designing. These are the most influential factors.

What is Netigma?

Netigma is an environment in which the end user can develop applications without writing special code. The multi-layered architecture allows you to customize the software developers at every stage and fully write custom code.

> (i) Netigma reduces the need to write code but does not prevent writing.

However, we know all together that the risk line increases as the code line increases. As the code line increases, the test requirements increase, the maintenance load increases, the dependence on the software developers increases, the requirement for documentation increases, ie costs and risks increase. One of the basic design principles of Netigma is to reduce the need to write code and ensure that a minimum source of software is needed in the field.
However, writing code is inevitable in most cases. Netigma also allows this.
Netigma has a unique design to achieve this basic goal. Many jobs can be done in the field such as creating new queries, making changes in the database, changing the way data is displayed, creating detail and summary reports, creating graphs, defining processes, creating new tables, including existing tables, defining powers. These jobs require different user capabilities and authorizations, but no software developer is required.

> (i) Netigma supports Geometry.

One of the most important features that can be said with Netigma is geometry support. All the features mentioned above provide geometry support. In this way, geometry can be used as a criterion in a prepared query.

- Records in this field
- Records cutting a line

GIS / GIS queries can be created as well as much more complex, and the report can be used for purposes such as thematic maps. In order to have GIS capability you will not need DBMS support. In other words, DBMS such as Oracle SDO or SQL Server 2008 will not be required. However, if you already have them, you will use Netigma

> (i) Netigma is independent of DBMS.

Netigma is independent of database management systems. The database is independent, including support for Netigma geometry. Microsoft SQL Server 2003, Microsoft SQL Server 2008, Oracle, Oracle SDO, Postgres, DB2, Microsoft Access are all supported in the same way. The applications you develop on Netigma are absolutely VTSY-independent. Netigma allows developers to access data access layers.

Although Geometry support is very different in different databases, Netigma keeps this difference from you and your software. Your software works in Oracle SDO as well as in Microsoft Access. Of course with different performance and number of users support.

(i) Netigma saves on licensing costs and protects your investment.

DBMS support provides significant savings from Netigma license fees with features such as geometry support. And without paying any price. It protects you from unnecessary investment. The software you develop is protected. It allows you to work with powerful and fast DCSs such as Postgres.

(i) Netigma is fast

Netigma is fast. Netigma offers a proportional performance with DBMS and hardware configuration. It doesn't compromise performance for features such as independence, flexibility it brings.

(i) Netigma archives

Netigma is capable of general document archiving. With the table you want, you can add the desired documents (disk or VT) and use them later. This table may also be a table you added from outside. Netigma has free text search and the search also includes the inside of the files it knows.

(i) Netigma operates together

Netigma is OGC certified. OGC WMS supports industry standards for geographic data sharing with WFS, CAT and WFC documents. They experience applications written on these services.

With Netigma, you can use web based software in your own environment.

Netigma interfaces can talk with desktop applications with the capabilities offered.

(i) Netigma supports state management

Prototype Development

The development of prototypes in all projects, large or small, is one of the keys to success. The prototypes and the writers and the users will be more likely to say the same thing. The possibility of changes that may occur in the later stages of work decreases.

Basic analysis and database design allows you to develop prototypes in a very short time. Moreover, you need very little software source for this prototype. Field experts can do this job. If the conditions are appropriate, the end user can also participate in the studies.

This working format gives you unimaginable benefits. With a prototype representing the project in the middle, both sides understand the project better. You can extract macro errors that can be found in the analysis and database design. The end user's confidence in the project increases. A concrete result spends more time on the project. This approach works even better in large projects. The risk is greater in large projects. Prototype development becomes more difficult, but the benefit will increase.

Many things done at this stage will work directly in the future. The product called the prototype is a pioneer of the result product. So there is no additional cost to develop prototypes with Netigma. On the contrary, the total cost will be reduced due to the risks it reduces and possibly faster analysis times, fewer meetings and less on-going and extended email chains. Increasing customer satisfaction.

Conclusion: With a prototype, the risks of both sides are reduced and the probability of the project being successful increases. With Netigma you can do it very easily.

Data Formers, Users

In general, data is a small part of those who use it. Interfaces to the nature of the work will be written for data entry. For these interfaces, Netigma also offers tools that do not require some ready-to-write code. However, final interfaces are specifically developed when requested.

Netigma has effective presentation tools. Tables, Graphs, Thematic maps are easily prepared. Data can be viewed through Google Earth. With statistical reporting, manager requirements are easily met. These needs can be met on site. Data can be retrieved as Word, Excel, PDF when selection results are requested.

Basic Usage Format

Each application has a certain approach. In some, this is consistent. Not in some. But the benefits of a coherent approach are indisputable. Consistent approach, not at a tedious level, facilitates user training, software maintenance, and enhances user ownership and loyalty.

Netigma helps you develop software that is consistent with the features it contains. Exits a basic structure box that can be summarized as Query, List results, Do your job. When you do your job, either the automated interfaces, the special interfaces will be activated or many special abilities will be activated. Go to the map is one of these skills. If you want Google Earth, Google Maps or a map component of your own can be called. An ability to search on Google has been added as an example. With a flexible mechanism, you can also call up other software and, if you want, you can open them in a separate tab in Netigma.

Summary

With Netigma you will experience a very different experience. With this experience, the developers will be much more productive, they will focus only on what they want to do. With Netigma, you will not create unnecessary software complexity and maintenance load by typing what has already been done.

Chapter 2 - Uses of Netigma Components

Netigma consists of many subcomponents. Some of them can create significant differences for the software setup.

Working with Netigma

Netigma components can be used via Querystring / url, and Netigma can access these accessible software. Applications developed over Netigma, such as BELNET, use the url mechanism in abundance.

Netigma in itself

- Home page
- Query Page
- Query Result
- List
- Graphic
- Report
- ..

And it creates many more pages dynamically. Netigma has special tools for creating url. You can create links in interfaces created with simple definitions and the url that these links create can be created freely from the data you can access. In this way, you can search in environments such as google, yahoo, bing, you can create another query from a query result when requested, a software you write can be called.
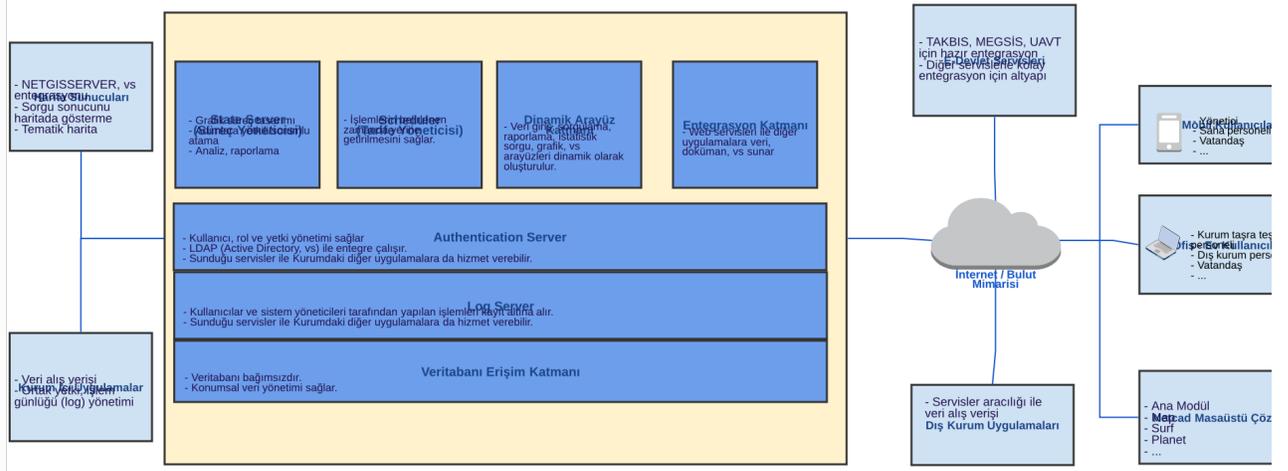
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Links to examples

Netigma Components

Some of the components in Netigma will affect your method of software development. We'il talk about them. You can access these components via .NET assembly or SOAP or url.

Netigma Mimarisi

(Diagram labels, partially overlapping:)

- NETGISSERVER, vs entegrasyonu
- Sorgu sonucunu haritada gösterme
- Tematik harita

State Server (Süreç Yönetimi)
- Grafik tasarımı
- (Süreç Yöneticisi)
- Analiz, raporlama

Scheduler (Zaman Yöneticisi)
- İşlemlerin belli zamanlarda yerine getirilmesini sağlar.

Dinamik Arayüz
- Veri giriş, raporlama, istatistik sorgu, grafik, vs arayüzleri dinamik olarak oluşturulur.

Entegrasyon Katmanı
- Web servisler ile diğer uygulamalara veri, doküman, vs sunar.

Authentication Server
- Kullanıcı, rol ve yetki yönetimi sağlar.
- LDAP (Active Directory, vs) ile entegre çalışır.
- Sunduğu servisler ile Kurumdaki diğer uygulamalara da hizmet verebilir.

Log Server
- Kullanıcılar ve sistem yöneticileri tarafından yapılan işlemleri kayıt altına alır.
- Sunduğu servisler ile Kurumdaki diğer uygulamalara da hizmet verebilir.

Veritabanı Erişim Katmanı
- Veritabanı bağımsızdır.
- Konumsal veri yönetimi sağlar.

- Veri alış verisi
- Oturum, işlem günlüğü (log) yönetimi

Internet / Bulut Mimarisi

- TAKBIS, MEGSİS, UAVT için hazır entegrasyon
- Diğer servisleri kolay entegrasyon için altyapı

- Servisler aracılığı ile veri alış verisi
Dış Kurum Uygulamaları

Mobil uygulamalar
- Saha personeli
- Vatandaş
- ...

- Kurum taşra teşkilatı
- Dış kurum personeli
- Vatandaş
- ...

Netcad Masaüstü Çözümleri
- Ana Modül
- Surf
- Planet
- ...

Authentication Manager (AuthorizationManager)

With this tool you can solve all your authorization needs. Logon pages, such as changing the password interface, integration with the active directory, all kinds of authoring tasks and the authorization of the software to move between the url to solve the issues.
The user can also store the data you want to keep for you.

Parameter Server (ParametreServer)

This tool provides an intelligent storage environment for any parameter you need. There may be a wide variety of parameters. Configuration parameters, options of applications, user preferences etc. can. Created parameters can be stored, versioned, transferred to another installation.
Your software saves what needs to be variable in the ParameterServer. That's the name, this is the genus. And it asks the Parameter Server for the value of this variable during the run. All these things happen very quickly.
Parameter saving can be a simple name, or can contain complex statements. A parameter can be calculated from others. In this way, a parameter allows dozens of parameters to change spontaneously and make things easier. But it does not prevent the individual changing of the place when it comes.
The parameter server allows different configurations to be configured together. Provides the creation of common variables. Enables system administrators to make all settings from a single source.

State Manager (StateServer)

Lets you define workflows.
Events in the workflow, events that enable state-to-state transitions, and actions to be taken when these events occur are prepared with visual management interfaces on the State Manager. This process is not needed for the software.
And recognizes the Netigma State Manager. Associate existing tables with workflows. Thus, in the case of a paperwork workflow scenario, in which case, documents can be requested for approval documents, approval pending documents can only be authorized by authorized users, and when the document is rejected, information e-mail can be sent to the user. Without writing code again.

Scheduler Manager (Scheduler)

Scheduler Manager , with a simple interface for all kinds of applications to follow the future business solves. This reduces the technical complexity of the applications and facilitates the fulfillment of possible requests. In many applications, the time-out rules apply. Requirements such as the expected return time of a forwarded message and the validity period of a document issued by the municipality may be resolved by the Tariff Manager.

Log Manager (LogServer)

Monitoring the functionality of all applications and user activities is necessary for the system to function properly. The registrar performs this function. In addition to the data recorded by the services and the controlled data, exceptions will be recorded.

Netgis Server Map Client (NETGIS SDK)

Netgis Server is an environment that includes ready-to-use applications and application development tools.

Ready-to-use applications can be easily adapted by field experts. In this way, a large percentage of the projects can be met without writing code. Ex: Shortest path analysis, thematic mapping, query preparation, Netigma integration Ör

Application development tools and add-ons can be made to ready-made applications. These plug-ins can be detected and run dynamically by the Netgis SDK.

Similar Content

- NETIGMA Home page
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