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19 Kasım

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GARANTI TEKNOLOJİ

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19 Kasım 2012 Pazartesi Le Méridien Istanbul

Garanti Teknoloji and Rational BuildForge Practical and Efficient Synergy

Çiğdem Yurdakul

Garanti Teknoloji, Change, Configuration, Release Management

Kerim Çakmak

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- **Introduction to IBM Rational Build Forge**
- **Brief overview of Garanti Teknoloji**
- **IBM Rational Build Forge Implementation and Execution Environment in Garanti Teknoloji**
- **Questions**

Who is Garanti Teknoloji (GT)?



- **A wholly-owned subsidiary of Garanti Bank, the second largest private bank in Turkey owned by Doğuş Group Co. and Banco Bilbao Vizcaya Argentaria S.A. (BBVA), under the principle of equal partnership**
- **One of the largest IT service providers in Turkey**
- **Creates tightly integrated and fully in-house developed, custom-fit IT solutions**
- **Provides technology infrastructure, software development, internet applications, integration, system management, security management, project management and office applications services to companies which are working on banking and financial services**



- **People**

- 964 - personnels
- 33 - average age
- 4% - average turnover rate
- 6.1 - average tenure

- **Capacity**

- 34,342 MIPS - Mainframe (z196) capacity
- 3 PB - Disk
- 2600 - Server
 - 1100 – Vmware
- 900 - Application Server
 - 730 – Unix
 - 170 – Windows
- 30000+ - PC and Mobile Devices

- **Customers**

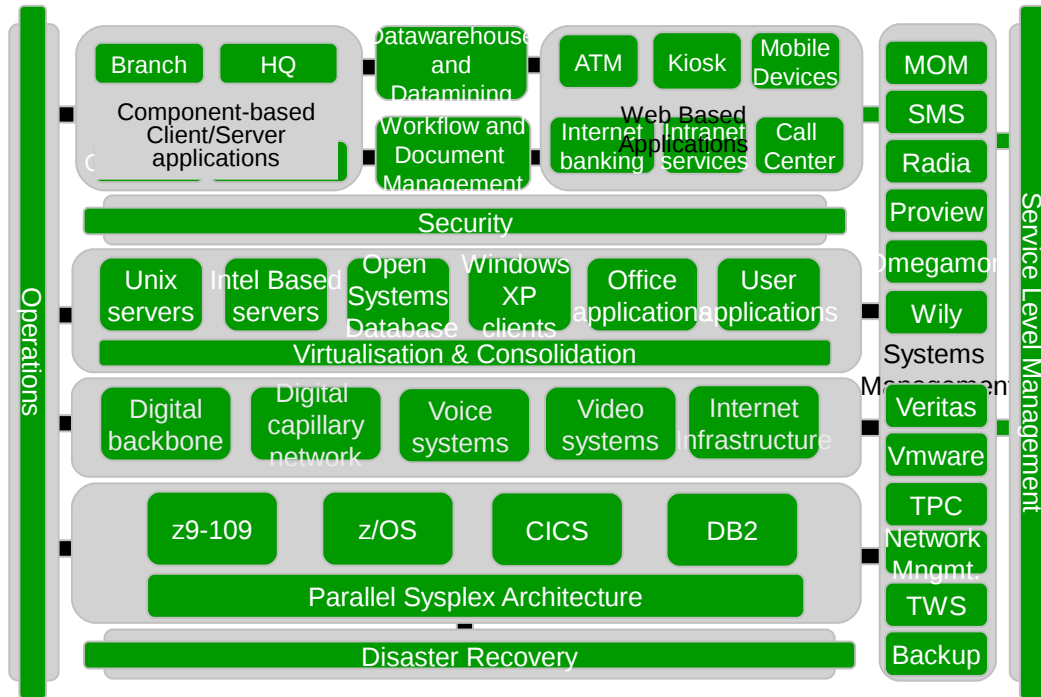
- 48 - firms
 - Garanti Bank, GarantiBank International, Garanti Leasing, Garanti Factoring, Garanti Emeklilik, Garanti Portföy, Garanti Yatırım....

- **Transactions**

- Daily 300M
- Daily 700K Internet Login
- Monthly 30 M Internet Operations

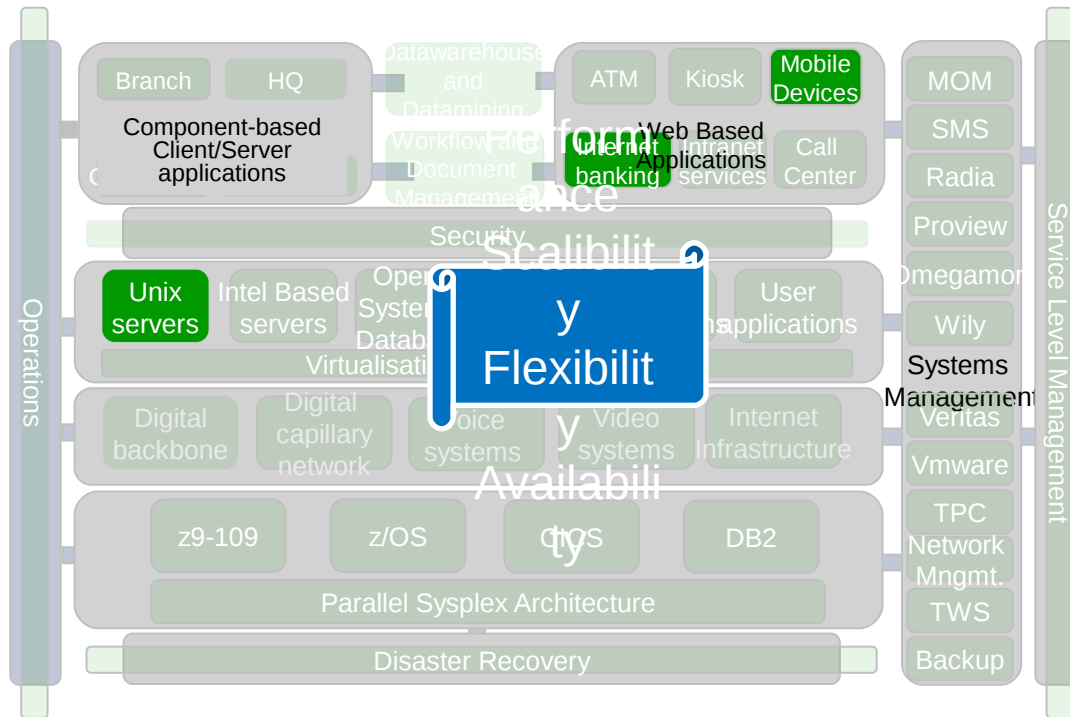
- **Process**

- 520000-Yearly Solved Problems
- 250000-Yearly Performed Changes
- 4700 - Yearly Performed Projects





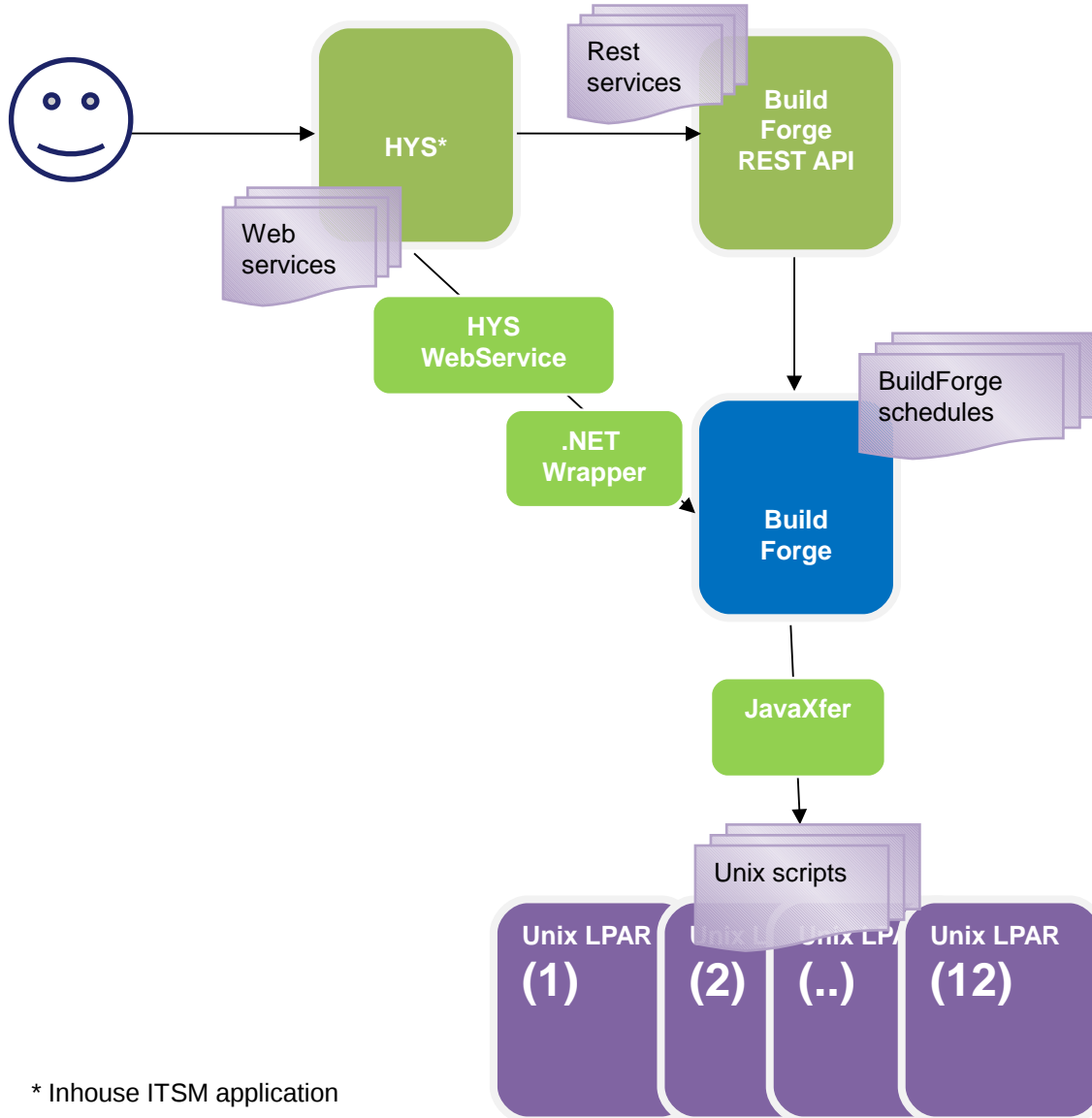
- **Flexibility**
 - Adaptable to different architectures
- **Compliance**
 - Compliant with COBIT
 - Obeys regulatory rules
- **Efficiency**
 - With less effort -coding, cost, maintenance- all platforms are supported
- **Performance**
 - Deployment should end in a short time
- **Scalability**
 - When applications grow too fast , deployment tool still valid
- **Availability**
 - Deployment is 7/24 process
 - While deployment occurs , deployed application is up and running
- **Reliability**
 - Frequently used , critical process running for critical applications



BuildForge in GT at a glance



- **Used as a deployment tool**
 - Used as a middleware deployment tool
 - User licence is for only administrators of the tools
- **Applicable to critical java applications running on WAS**
 - Internet branch application
 - Social media application
- **Integrated with process management system**
 - Change Management
 - Configuration Management
 - Release Management
- **Integrated with build process which is done another tool (Hudson)**
- **Frequent process**
- **High volume transferred to more than 10 servers**



* Inhouse ITSM application

- Benefits
 - Seamless
 - Server count is scalable
 - Traceable
 - Logging
 - Restartable

- Figures
 - 120 MB * 12 servers
 - Annual count 350
 - End-to-end process duration 46 minutes instead of 150 min

- Integrations
 - CMDB
 - HYS Process
 - GT Deployment API



Flow - Request from HYS

The screenshot shows a software interface for deployment management. The main window is titled "GT D 31664658 - Webpage Dialog". It features a menu bar with options like "Güncelle", "İşlemler", "Detaylar", "Atama", "Kayıt Ekle", and "Konfigürasyon". The interface is divided into several sections:

- Kayıt** (Registration): Shows the ID "31664658" and details for "Program Taşıma / Silme-Java Deployment".
- Etkilenen Konfigürasyon** (Affected Configuration): A table with columns "Tipi", "Adı", and "Açıklama". It lists "Application" with "GSUBE" as the name and "Internet Şube Uygulaması" as the description. A note below the table says "(Toplam kayıt: 1)".
- Planlama** (Scheduling): A table with columns "Başlangıç" (Start) and "Bitiş" (End). The "İstenen" (Requested) row shows dates "04.11.2012" and "05:00" for both start and end.
- Kategori Bilgileri** (Category Information): A section with a "Deployment..." button.
- Deployment İşlemleri** (Deployment Operations): A sub-dialog titled "Deployment İşlemleri -- Webpage Dialog". It contains:
 - Eklene Dosyalar** (Added Files): A table with columns "Dosya Adı" (File Name) and "Server Adres" (Server Address). It lists "ADC_Internet_Branş_Web_UI.war" with the address "/vhosting/GBSUBE.ear/".
 - Deployment Parametreleri** (Deployment Parameters): A section with "Deployment Yöntemi" (Deployment Method) and "Touch Path" fields. It also includes checkboxes for "Konfigürasyonu Dosyalarını Kopyala" (Copy Configuration Files) and "Sunucuyla Otomatik Durdur-Başlat" (Automatically Stop-Start with Server).

Red callout boxes highlight specific elements: "Application" points to the "Etkilenen Konfigürasyon" table; "Schedule Request" points to the "Planlama" table; "File location" points to the "Eklene Dosyalar" table; and "Deployment Parameters" points to the "Deployment Parametreleri" section.



Flow – Execution at Build Forge

BuildForge - Jobs - Windows Internet Explorer

http://tekbfg01/fullcontrol/index.php?mod=jobs&action=build.view&bf_id=0270f05d0c5e1000a04e190066c066c0

File Edit View Favorites Tools Help

Favorites GT GT-Dev Support GTcom HYS GBcom GT Organizasyon

BuildForge - Jobs

Rational Build Forge IBM

Dashboard Console Reports Logout Ibrahim Zorlu

Jobs >> J31915960 JavaParallelDeploy

Status: Running -- Executing GetDeploymentServerNames Commands Date: 11/18/12 12:30 PM Project: JavaParallelDeploy (Base Snapshot) Selector: tekbfg01_sel (Base Snapshot)

Class: Production

Filter Showing 1 - 43 of 43 Auto Paginate Purge Job Restart Job Cancel

Step	Step Name	Result	Server (Selector)	Runtime	Chains
1	InitVariables	Passed	tekbfg01 (Default)	0:00:09	
2	CallHysNotifyService	Passed	tekbfg01 (Default)	0:00:10	
3	GetApplicationInfo	Passed	tekbfg01 (Default)	0:00:08	
4	CheckApplicationStatus	Passed	tekbfg01 (Default)	0:00:06	
5	CheckRestartInfo	Passed	tekbfg01 (Default)	0:00:05	
6	GetDeploymentServerNames	Running	tekbfg01 (Default)	0:00:30	
7	ComputeSecondaryLparCount	....	tekbfg01 (Default)	0:00:00	
8	DeployPrimaryLPAR1	....	tekbfg01 (Default)	0:00:00	
9	DeployPrimaryLPAR2	....	tekbfg01 (Default)	0:00:00	
10	DeployPrimaryLPAR3	....	tekbfg01 (Default)	0:00:00	
11	DeployPrimaryLPAR4	....	tekbfg01 (Default)	0:00:00	
12	DeploySecondaryLPAR1	....	tekbfg01 (Default)	0:00:00	
13	DeploySecondaryLPAR2	....	tekbfg01 (Default)	0:00:00	
14	DeploySecondaryLPAR3	....	tekbfg01 (Default)	0:00:00	
15	DeploySecondaryLPAR4	....	tekbfg01 (Default)	0:00:00	
16	DeploySecondaryLPAR5	....	tekbfg01 (Default)	0:00:00	
17	DeploySecondaryLPAR6	....	tekbfg01 (Default)	0:00:00	
18	DeploySecondaryLPAR7	....	tekbfg01 (Default)	0:00:00	
19	DeploySecondaryLPAR8	....	tekbfg01 (Default)	0:00:00	
20	DeploySecondaryLPAR9	....	tekbfg01 (Default)	0:00:00	
21	DeploySecondaryLPAR10	....	tekbfg01 (Default)	0:00:00	
22	DeploySecondaryLPAR11	....	tekbfg01 (Default)	0:00:00	
23	SumDeploymentResult	....	tekbfg01 (Default)	0:00:00	
24	CheckDeployResults	....	tekbfg01 (Default)	0:00:00	
25	RestartPrimaryLPAR1	....	tekbfg01 (Default)	0:00:00	
26	RestartPrimaryLPAR2	....	tekbfg01 (Default)	0:00:00	
27	RestartPrimaryLPAR3	....	tekbfg01 (Default)	0:00:00	
28	RestartPrimaryLPAR4	....	tekbfg01 (Default)	0:00:00	
29	SumPrimaryRestartResults	....	tekbfg01 (Default)	0:00:00	
30	CheckPrimaryRestartResults	....	tekbfg01 (Default)	0:00:00	
31	RestartSecondaryLPAR1	....	tekbfg01 (Default)	0:00:00	
32	RestartSecondaryLPAR2	....	tekbfg01 (Default)	0:00:00	
33	RestartSecondaryLPAR3	....	tekbfg01 (Default)	0:00:00	
34	RestartSecondaryLPAR4	....	tekbfg01 (Default)	0:00:00	
35	RestartSecondaryLPAR5	tekbfg01 (Default)	0:00:00	
36	RestartSecondaryLPAR6	tekbfg01 (Default)	0:00:00	

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Local intranet 100%



Flow - Execution

The screenshot displays a web application interface for configuration management. The main window is titled "GT-HYS -- Webpage Dialog" and shows the configuration details for "GBSUBE01".

Configuration Details:

- İlişki Tipi:** Konfigürasyon...
- İlişki Seviyesi:** Detaylı Arama >>
- İlişkili Konfigürasyonlar:**
 - Application
 - Business Application
 - DB2 Sul system
 - PDA
 - Firm Served By
 - LPAR
 - GBSUBE02
 - GBSUBE03
 - GBSUBE04
 - GBSUBE05
 - GBSUBE06
- Konfigürasyon Bilgileri:**
 - Tip...:** LPAR
 - Açıklama:** Yeni internet Şube Sunucuları
 - Release Statü:** Live/Production
 - Kritiklik Seviyesi:** High
 - Hizmet Verilen Firma...:** GARANTİ BİLİŞİM TEKNOLOJİSİ VE TİCARET
 - Sistem Sorumlusu...:** GT UNIX PLATFORMLARI
 - İşletim Sistemi...:** AIX
 - Sunucu Türü...:** VM
 - Kurulum Yeri...:** GARANTİ BİLİŞİM TEKNOLOJİSİ VE TİCARET
 - TWS Olarak Kullanım...:** Evet
 - IP...:** 192.XXX.YYY.Z
 - Aktiflik Durumu:** Active
 - Lokasyon:** Güneşli Üst Kat Sistem Odası
 - Versiyon:** 6.1.6.3

Flow Execution Path:

- The "Tipi" field is set to "Application".
- The "İlişkili Konfigürasyonlar" list shows "Application" selected.
- The "GBSUBE01" entry is highlighted in the list.
- The "Konfigürasyon Bilgileri" section shows the configuration details for "GBSUBE01".

Watermark: CMDDB



Flow – Execution at Build Forge

BuildForge - Jobs - Windows Internet Explorer

http://tekbfg01/fullcontrol/index.php?mod=jobs&action=build.view&bf_id=b8bbc0060c5d1000bf119001f221f22

Rational Build Forge IBM.

Dashboard Console Reports Logout: Cigdem Yurdakul

Jobs > **J31664658** JavaParallelDeploy Help ?

Status: **Completed -- Passed -- Built** Date: 11/4/12 5:00 AM Project: **JavaParallelDeploy (Base Snapshot)**
 Selector: **tekbfg01_sel (Base Snapshot)** Class: **Production**

Showing 1 - 26 of 50 [Display All](#)

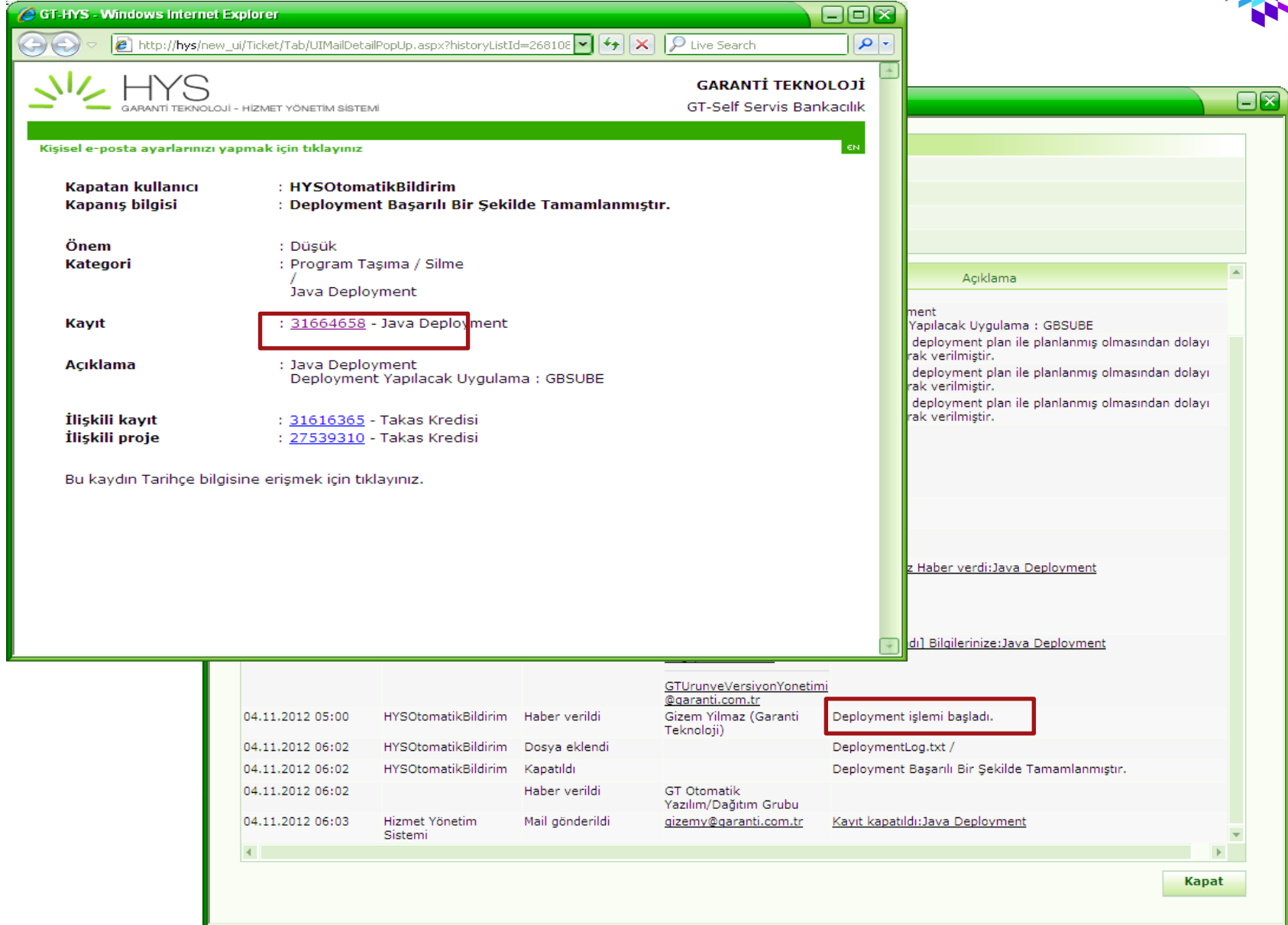
Purge Job Restart Job Cancel

Step	Step Name	Result	Server (Selector)	Runtime	Chains
1	InitVariables	Passed	tekbfg01 (Default)	0:00:09	
2	CallHysNotifyService	Passed	tekbfg01 (Default)	0:00:17	
3	GetApplicationInfo	Passed	tekbfg01 (Default)	0:00:07	
4	CheckApplicationStatus	Passed	tekbfg01 (Default)	0:00:07	
5	CheckRestartInfo	Passed	tekbfg01 (Default)	0:00:06	
6	GetDeploymentServerNames	Passed	tekbfg01 (Default)	0:00:43	
7	DeployPrimaryLPAR1	Passed	tekbfg01 (Default)	0:36:38	
8	DeployPrimaryLPAR2	Passed	tekbfg01 (Default)	0:36:00	
9	DeployPrimaryLPAR3	Skipped	tekbfg01 (Default)	0:00:53	
10	Else Part:DeployPrimaryLPAR3	Passed	tekbfg01 (Default)	0:01:05	
11	DeployPrimaryLPAR4	Skipped	tekbfg01 (Default)	0:01:00	
12	Else Part:DeployPrimaryLPAR4	Passed	tekbfg01 (Default)	0:00:32	
13	DeploySecondaryLPAR1	Passed	tekbfg01 (Default)	0:33:23	
14	DeploySecondaryLPAR2	Passed	tekbfg01 (Default)	0:35:48	
15	DeploySecondaryLPAR3	Passed	tekbfg01 (Default)	0:35:51	
16	DeploySecondaryLPAR4	Passed	tekbfg01 (Default)	0:37:08	
17	DeploySecondaryLPAR5	Passed	tekbfg01 (Default)	0:22:13	
18	DeploySecondaryLPAR6	Passed	tekbfg01 (Default)	0:23:52	
19	DeploySecondaryLPAR7	Passed	tekbfg01 (Default)	0:23:01	
20	DeploySecondaryLPAR8	Passed	tekbfg01 (Default)	0:23:33	
21	DeploySecondaryLPAR9	Passed	tekbfg01 (Default)	0:35:36	
22	DeploySecondaryLPAR10	Passed	tekbfg01 (Default)	0:35:33	
23	DeploySecondaryLPAR11	Skipped	tekbfg01 (Default)	0:00:54	
24	Else Part:DeploySecondaryLPAR11	Passed	tekbfg01 (Default)	0:00:49	
25	SumDeploymentResult	Passed	tekbfg01 (Default)	0:00:05	

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Flow – Notification



The screenshot shows a web browser window titled "GT-HYS - Windows Internet Explorer" displaying a notification page. The page header includes the HYS logo and "GARANTİ TEKNOLOJİ GT-Self Servis Bankacılık". The notification details are as follows:

Kapatan kullanıcı : HYSotomatikBildirim
Kapanış bilgisi : Deployment Başarılı Bir Şekilde Tamamlanmıştır.

Önem : Düşük
Kategori : Program Taşıma / Silme / Java Deployment

Kayıt : **31664658** - Java Deployment

Açıklama : Java Deployment
Deployment Yapılacak Uygulama : GBSUBE

İlişkili kayıt : [31616365](#) - Takas Kredisi
İlişkili proje : [27539310](#) - Takas Kredisi

Bu kaydın Tarihçe bilgisine erişmek için tıklayınız.

The right side of the browser shows a detailed description of the deployment process, mentioning "Yapılacak Uygulama : GBSUBE" and "deployment plan ile planlanmış olmasından dolayı".

Below the browser window, a detailed log of the deployment process is shown:

Tarih	Kullanıcı	Eylem	Detaylar	Notlar
04.11.2012 05:00	HYSotomatikBildirim	Haber verildi	GTUrunveVersiyonYonetimi@garanti.com.tr	Deployment işlemi başladı.
04.11.2012 06:02	HYSotomatikBildirim	Dosya eklendi	Gizem Yılmaz (Garanti Teknoloji)	DeploymentLog.txt /
04.11.2012 06:02	HYSotomatikBildirim	Kapatıldı		Deployment Başarılı Bir Şekilde Tamamlanmıştır.
04.11.2012 06:02		Haber verildi	GT Otomatik Yazılım/Dağıtım Grubu	
04.11.2012 06:03	Hizmet Yönetim Sistemi	Mail gönderildi	gizemy@garanti.com.tr	Kayıt kapatıldı:Java Deployment

A "Kapat" button is visible at the bottom right of the log area.

Questions?



Back up slides



Next Steps



- **AddTarget Platforms**
 - Mainframe
 - Windows
- **Orchestration**