

Registry Solution Overview

APTLD Meeting

May 24, 2008

by

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Qinetics Solutions Berhad

Agenda

> **Company Overview**

Background, Market, Track Record

Solution Overview

Technology

Services

Support

Company Background

Qinetics

webnic
accelerate your business
Internet Services
Wholesale Registrar

- Asian one-stop registrar for 40+ TLDs
- Dominant registrar in South East Asia
- Manage over 400K domain names
- Wholesale service to 1000+ resellers
- Among top IDN registrar worldwide

RegistryASP
Software Solutions
Registry-Registrar

- Leading SRS solution provider
- Registry outsourcing services
- Professional and consultancy services
- Proven track record

Qinetics
IT Support
Outsourcing

- IT Outsourcing services
- 24/7 support services, SLA commitment
- Partnership with Microsoft, Oracle, Sun Microsystems, IBM, Symantec, Nortel and Cisco

RegistryASP

Our Markets

Registrars

ccTLD
Registries

gTLD
Registries

Backend
Solution

Outsourcing
Services

Technical,
Policy &
Marketing
Consultancy

Customized
Programming

Sponsorship

RegistryASP

Registry – Registrar Solutions

“We Work Harder” | “Adaptive, Secured, Proven”

RegistryASP

Qinetics Awarded by SGNIC to provide Registry System

RegistryASP, a division of Qinetics undertake the turnkey project for provisioning of Registry-Registrar system for .SG domain names for a SG\$1.2 million.

|
Kuala Lumpur, Malaysia – 19 May 2008 – Malaysian-based Qinetics Solution Berhad (“Qinetics”) has been awarded by Singapore Network Information Centre (SGNIC) Limited (“SGNIC”) for the provisioning of a registry-registrar domain name system for the .sg domain name.

RegistryASP

Track Records

SGNIC
(.SG Registry)



Turnkey Registry-Registrar system development

HKDNR
(.HK Registry)



Registry-Registrar system development, support and maintenance

CIM
(.CD Registry)



Registry service outsourcing

MYNIC
(.MY Registry)



WHOIS, Billing, Service Automation, Customized programming service

WEBNIC
(Registrar)



Registrar-Reseller system development

Case Study

.HK Registry



- Migration from Legacy Systems
- IDN rollout
- ISO 27001 security framework compliant
- Extensive business process automation and report customization
- Flexible integration with 3rd party systems
- SLA compliant
- Flexible to accommodate various promotion efforts

Agenda

Company Overview

> Solution Overview

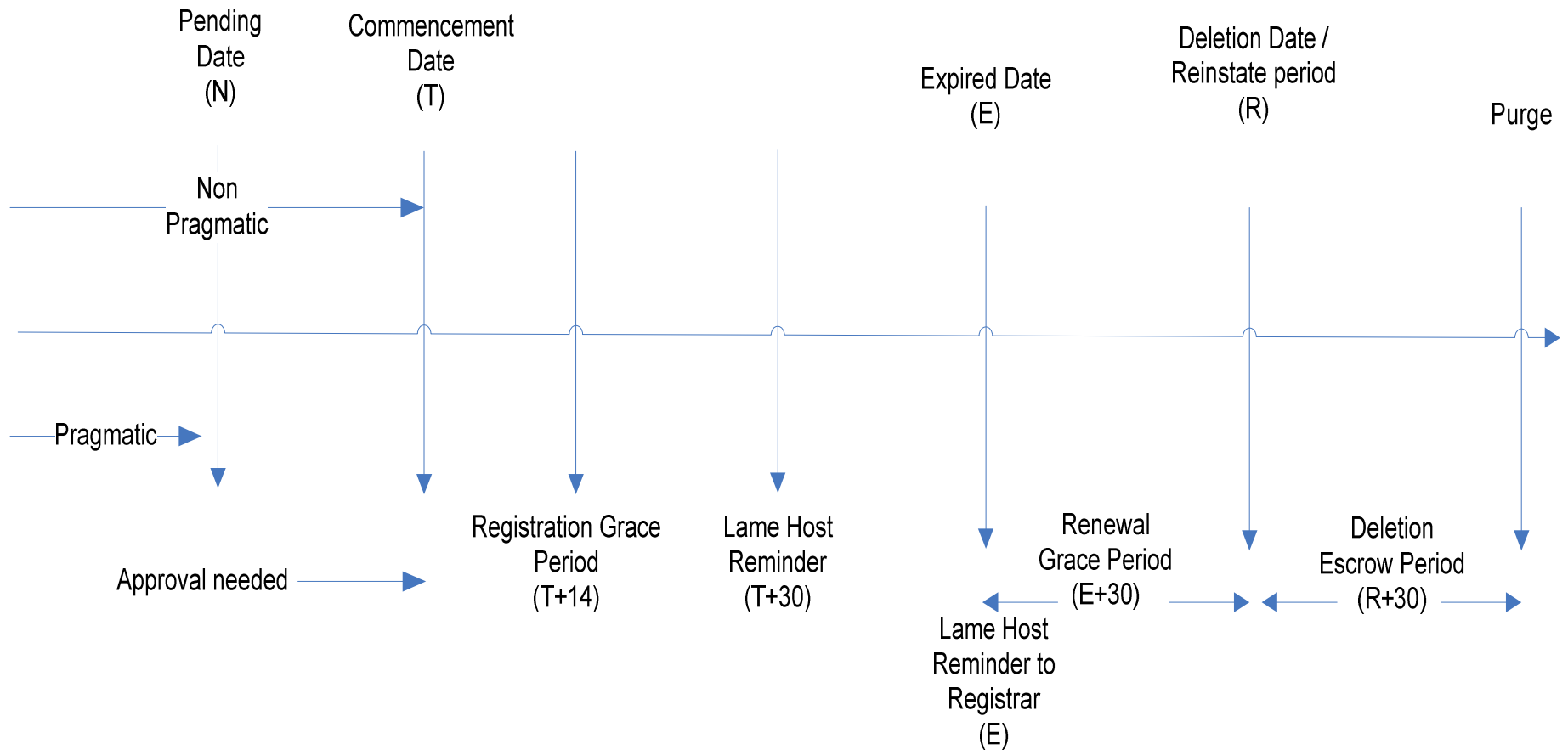
SRS Models, Policy, Turnkey Solutions,
Architecture, Features & Functionalities

Technology

Support

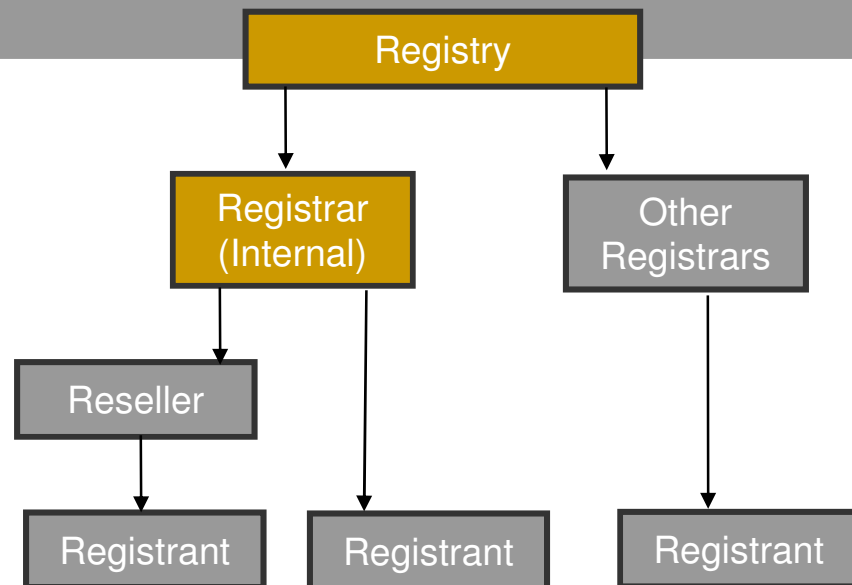
Demo

Policy Engine – DLC

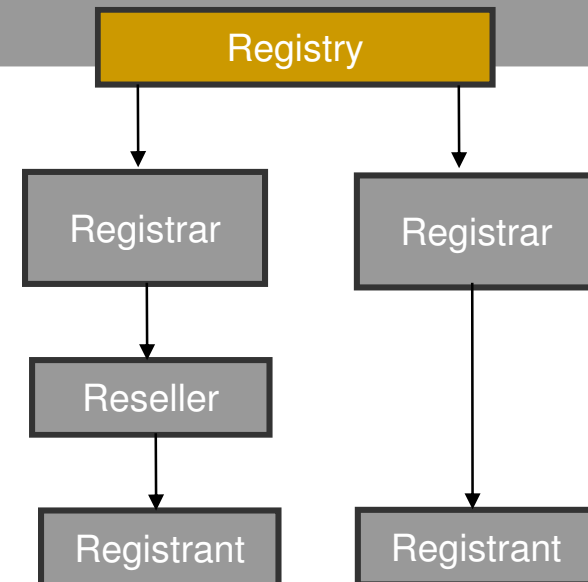


SRS Models

Registry-Registrar-Reseller



Registry-Registrar



RegistryASP is flexible to adapt ANY business model of Registry

Turnkey Solution Proposition

RegistryASP SRS integrates seamlessly with legacy components in existing systems

Modular and Scalable

Adapt local rules and policies

High Security and Availability

Standard compliance

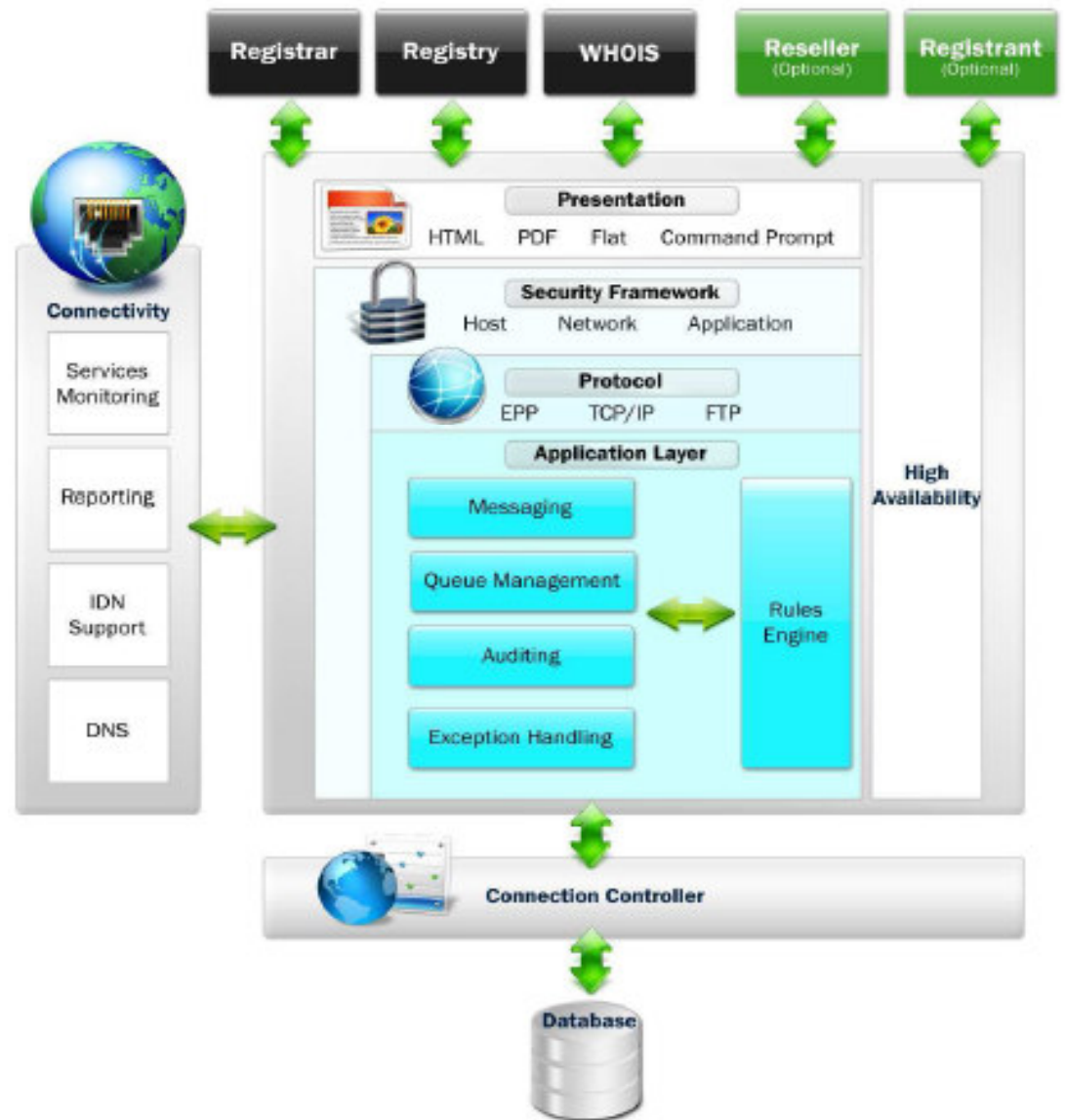
Marketing Oriented



RegistryASP

System Architecture

- Modular design
- 4R web panels
- External services
- High availability
- Integration options



Features and Functionalities

Customer Relation Management

- Registrar Management
- Profile Management
- User Management
- Tracking
- Reports



Business Process

- System Configuration
- Domain Filter
- Registry Admin
- DNS Admin

Registration Management

- Domain Management
- Host Management
- Contact Management
- IDN Management
- WHOIS Query



Billing and Payment

- Renewal Notification
- Billing
- Payment
- Accounting (interface)



Marketing Management

- Pricing controller
- Promotion
- Email Manager

Features and Functionalities

Some key functionalities at Web Panels

- Validation of Registrant
- Restricted & Reserved List
- White List and Black List
- Tracking
- Email Templates
- Multi Level Access Control
- IDN Support
- Promotion schemes
- Reports
- Multi Lingual Interface Support

Search Domain

Domain Name: (Without extension)
Contact Handle ID:
Company Name:
Status:
Name Server:
Year(s):
Date Range:
From:
To:
Sort by:

Domain Mgmt - Search Functions

Submit

Domain:	Registrant Handle:	Date Created: Date Expires: Date Modified:	Status:	NS:
HSBC.COMEXT	HK1278545T Reset Password	10-Oct-2009 10-Oct-2010 11-Jan-2010	Active	NS1.HSBC.COMEXT NS1.HSBC.COMEXT NS1.HSBC.COMSG NS2.HSBC.COMSG
HSBC.ORGEXT	HK1278549T Reset Password	10-Oct-2009 10-Oct-2010 11-Jan-2010	Active	NS1.TRADEEASYEXT.NET NS1.TRADEEASYEXT.NET
HSBC.EXT	HK1466305T Reset Password	10-Oct-2009 10-Oct-2010 11-Jan-2010	Active	NS1.HSBC.COMEXT NS1.HSBC.COMEXT NS4.HSBC.COMHK

Auto Screening

Word Listing

Filter Management – Rule-based Reserve List

Word Code	Description	Date Modified
country	country list	05-Jun-2007 19:10:41
single-char	single character	25-Dec-2006 18:45:33
gov-names	government names	01-Sep-2006 16:52:06
sgnic-names	sgnic names	05-May-2007 18:53:50
special-chars	filtering for special characters	04-Jun-2007 18:53:50
bank-names	reserved names for banking industries	31-Jan-2008 00:20:24

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Rules Listing

Description	Applied Word Code	Applied to	Applied to Extensions	Status	Date Modified
exact match	country, single-char	Pragmatic	SG, COM.SG	Active	04-May-2007 19:10:41
start with	gov-names	Pragmatic, Reserve	SG, GOV.SG	Inactive	25-Dec-2006 18:45:33
ends with	sgnic-names	Pragmatic, Reserve	SG	Active	01-Sep-2006 16:52:06
start or end with	special-chars, country	Reserve	SG, COM.SG, EDU.SG	Active	05-Jun-2007 18:53:50

Black List

Search by Domain: (without SGension)

Use asterik (*) for wildcard search.

Filter Management – Black List

	Domain Name	Description
<input type="radio"/>	PS.COM.SG	A dispute was received by Registry on 9 May 2003; The decision from Registry is finalized on Aug 11, 2003 that the panelists "reject the complaint". Therefore this domain is no longer being blacklisted anymore from Aug 11, 2003.
<input type="radio"/>	PPS.COM.SG	A dispute was received by Registry on 16 May 03; decision from Registry is finalized on 14 Aug 03 that the panelists ordered a removal of the DN from Registry. As this DN has been released to public on 8 Nov, so this domain is no longer being blacklisted anymore.
<input type="radio"/>	SHUION.SG	A dispute was received by Registry on 24 Jun 2004. Decision from Registry is to order the cancellation of this DN. The DN is cancelled on 9 Sept 04.
<input type="radio"/>	GRUNDFOS.SG	A dispute was received by Registry on 05 Aug 2005. Registry informed on 10 Oct 05 of the decision of the panelist orders the DN transferred to the complainant.

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Features and Functionalities

Billing System

- Various Payment Type
- Secure Payment Gateway Connection (SSL API / SOAP) for registrar online Top-up
- Configurable Low Balance Alert
- Online Invoices
- Strong flexible and complete financial reports
- Amortization function to check deferred revenue

Registrar Configuration

Registrar ID:

Company: DEMO SYS

Registrar Mgmt – Billing

Registrar ID

-RR123456

Status

Active ▼

First Threshold Limit Reminder

Second Threshold Limit Reminder

Auto Suspension Balance

Tax Applicable

Yes ▼

Accreditation Expiry Date

01 ▼

May ▼

2008 ▼

Accreditation Expiry Reminder

01 ▼

May ▼

2008 ▼

EPP Threads Limit

Invoice Statement Cycle

Day ▼

submit

Features and Functionalities

Reports

- Transactional and Customized Reports
- Flexible and configurable
- Options of Reporting Tools
- Report Wizard ease creation of reports
- WYSIWYG editor
- Formula and rules based
- Grouping capability
- Scheduling and cache capability

Registrar code: DEMO-RER Company: DEMO SYS

Registrar Mgmt – Feature Access Controller

Domain Manager

<input checked="" type="checkbox"/> Query Domain	<input checked="" type="checkbox"/> Domain Registration	<input type="checkbox"/> Domain Renewal
<input checked="" type="checkbox"/> Domain Transfer	<input type="checkbox"/> Reinstate Domain	<input type="checkbox"/> Transfer Ownership
<input checked="" type="checkbox"/> Delete Domain	<input checked="" type="checkbox"/> Modify Domain Contact	<input checked="" type="checkbox"/> Modify Domain Name Server
<input type="checkbox"/> Modify Domain Status	<input checked="" type="checkbox"/> Power Search	<input checked="" type="checkbox"/> Search Domain

Host Manager

<input checked="" type="checkbox"/> Query Host	<input checked="" type="checkbox"/> Add Host	<input checked="" type="checkbox"/> Modify Host
<input checked="" type="checkbox"/> Delete Host		

Contact Manager

<input type="checkbox"/> Query Contact	<input checked="" type="checkbox"/> Add Contact	<input checked="" type="checkbox"/> Modify Contact
<input checked="" type="checkbox"/> Delete Contact		

Registrar Manager

<input type="checkbox"/> Registrar Profile	<input checked="" type="checkbox"/> Change EPP Password	<input checked="" type="checkbox"/> IP Access Control
<input checked="" type="checkbox"/> Account Balance		

User Manager

<input checked="" type="checkbox"/> Add User	<input checked="" type="checkbox"/> Modify User	<input checked="" type="checkbox"/> Delete User
<input checked="" type="checkbox"/> User Access Controller	<input type="checkbox"/> Unlock User	

Report Manager

<input type="checkbox"/> Domain Transactions	<input type="checkbox"/> Payment Transactions	<input type="checkbox"/> Domain Statistics
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Agenda

Company Overview

Registry Solution Overview

> Technology EPP, DNS, IDN, WHOIS

Service

Support

EPP

Extensible Provisioning Protocol

- XML Based data exchange protocol
- Support EPP with IDN extension
- Contact field extension for local policy requirement
- TCP connections method
- SSL/TLS Handshake
- Any signed SSL certificate and trust certificates
- Username, plain text password validation
- Certificate validation
- IP Subnet filter
- Firewall and border router filters to resist hackers
- Registrar tool kit provided

DNS

- Stealth Dynamic DNS
 - Scalable DNS enable diversification
 - Stealth and slave mode for consistent resolution
 - Newly created zone files loaded immediately
 - Zone updates are done dynamically / incremental
 - Reconciliation program to check zones count
 - Allow toleration level between today and yesterday zones
 - Zones syntax are check before reload
 - 99.999% uptime
 - Support DNSSEC and IPv6
 - Security
- Secondary Anycast DNS

WHOIS

WHOIS

- Web based WHOIS
- Port 43 command prompt WHOIS
- Support multilingual for web based WHOIS
- Query Control by Object Type
 - Domain
 - Host
 - Contact
 - Registrar
- IP Access Control, 99.99% uptime
- Configurable WHOIS display format
 - Web Based
 - Command prompt

IDN

Internationalized Domain Name

- Choices: IDN.ccTLD, IDN.ASCII.ccTLD, IDN.IDN
- Punycode (RFC 3492)
- UTF8 Encoding
- Language Table
- Language Tag
- Variants implementation
- Conflict Resolution – First come first served
- IDN and zones
- IDN and WHOIS
- IDN conversion tools for registrar

Agenda

Company Overview

Registry Solution Overview

Technology

> **Services**

Security, Performance Monitoring, Implementation, Migration
QA, Documentation, Project Management

Support

Security

Security Policies

- Physical security setup
- Role of the servers
- Review hosts relationship
- Authentication & account management policy
- Password policy
- Services and ports required in servers
- Firewall rules
- Set up and review logs
- Define level of security and actions required
- Define backups and operational policy
- Schedule routine network-based vulnerability scan

System Performance

Performance Management

- Performance Optimization Plan
 - Gather configuration and traffic information
 - Data analysis
 - Performance Base-lining
 - Solve problem
 - Plan changes
 - Evaluate
 - Implement changes
- Potential Affected Areas:
 - CPU, I/O, Memory and Buffer, Pipe, Queue, Network Speed and Distance, Application
- Capacity
 - Capacity of concurrent EPP sessions (Server Spec Dependent)

System Migration

- Hardware installation and security configuration
- Network and security setup
- Application installation and implementation
- Test suite creation and data conversion
- Form Registrar Task Force
- DNS zone reconciliation and zone transfer test
- Start task force testing and system fine tuning
- Rerun test suite
- Data migration and reconciliation check
- Run parallel DNS and WHOIS servers
- Launch new platform
- DNS, EPP and WHOIS servers switch over

Implementation

Delivery and Installation

- Responsible for overall setup and project management:
- Install hardware and appliances
- Configure appliances and servers
- Test network & server access
- Test configurations
- Install software and applications
- Configure applications
- Test software and applications
- Detail plans to be provided during implementation

Documentation

Documentation and Guideline

- Application Software Documentation
- System Software Documentation
- System Hardware Documentation
- System Administration/Operation Documentation
- User/Training Guide

Quality Assurance

Quality Program

- CMMI – Quality Process
 - RegistryASP development – adoption of CMMI Level 2
- ISO27001 - Security
- PMP (Project Management Professional)
 - PMI certified training
- Quality Assurance Plan
 - Produce evaluation document
 - Compliance and non compliance report
 - Corrective action report
 - Audit Team to conduct audit prior to UAT

Quality Assurance

Test Plan

- Application;
- Security;
- Performance;
- System audit; and
- Data accuracy

Testing Stages

- Proper user requirement study and interface design
- Test Case Preparation
- 5 Stages of Testing
- Constant System Audit
- System Audit Log with debug and info mode to track and recover problem

Project Management

Project Management Plan

- **Initiating**
 - Project Charter
- **Planning**
 - Gap Analysis
 - Requirements Development
 - Risk Assessment
 - Quality Management Plan
 - Procurement Plan
- **Implementation**
 - Development, installation and configuration
 - Testing
 - System Audit
 - Performance tuning
 - Integration
 - Commissioning
- **Monitoring and Controlling**
 - Change Request
 - Milestone check
 - Progress meeting
 - Risk monitoring
- **Closing**
 - Documentation and Training
 - Project closure
 - Warranty
 - Maintenance

Agenda

Company Overview

Registry Solution Overview

Technology

Services

 **Support**

Structure, Coverage

Support

Support Structure

- **Helpdesk**
 - Web/email
 - Phone
- **Emergency**
 - 24/7 hotline
- **Response**
 - Within 2 hours
- **Support**
 - Local and remote team
- **Multiple time zone**
- **Various language support**
- **Support Roles**
 - Multi-level escalation
 - Application Software
 - OS, database
 - Hardware
 - DNS and service availability
- **Qualifications**
 - Application support (Java programmers)
 - DBA
 - Network and Security specialist
 - System support

Support

Service Coverage

- **Defined SLA**
- **Daily log check**
- **Monitoring and alerts**
- **Version upgrade and hotfix**
- **Overall support coordinator**
- **Hardware**
- **Advisory and Consultation**
- **User Training**
- **Documentation**
- **Change request**
- **Periodic reports**

Summary

- **Agile to adapt in meeting future market demands**
 - Strong market understanding;
 - Commitment into continuous customization and upgrade;
- **Quick resolution to problems**
 - Attentive 24/7 support;
 - Local/remote support engagement.
- **Proven track records**
 - Development, implementation and maintenance of registry;
 - Proven commitment in SLA;
 - Security and integrity audit;
 - IDN deployment;
 - Continuous involvement of industry development.
- **Risk free investment**
 - Fixed or variable pricing offer – lower cost of ownership;
 - Comprehensive maintenance support outsourcing.

Thank You

Questions and Answers

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