Benefits, Drawbacks, and Evaluation of In-House Registry Management

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PANDI (Pengelola Nama Domain Internet Indonesia) is ccTLD (Country Code Top Level Domain) Registry for Indonesian Country domain .ID
About PANDI: Membership
.ID Active Domain
Name in 2020

<table>
<thead>
<tr>
<th>Target</th>
<th>472,569</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realization</td>
<td>486,814 (+133,909)</td>
</tr>
<tr>
<td>Increase percentage</td>
<td>37,94%</td>
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In 2021

We already reach
More than 500,000 active domain
Registry Services

Registry System Operation Method

DNS

Registry System

Whois/RDAP

In-House Registry System

Outsource with Infrastructure on Premise

Outsource with SaaS (Software as a Services)
History of .id Registry System

2007
SINGLE APPLICATION REGISTRY-REGISTRAR

2011
OUTSOURCED REGISTRY SYSTEM SUPPORTING SRS (SHARED REGISTRY SYSTEM)

2012
OPEN NEW REGISTRARS USING OUTSOURCED REGISTRY SYSTEM

2018-2020
DEVELOPMENT OF In-House Registry System

FEBRUARI 2020
MIGRATION OUTSOURCED REGISTRY SYSTEM TO In-House Registry System
In-House Registry Management
IRS (In-House Registry Management) = Technology Sovereignty

Technology Sovereignty means preserving options by developing and maintaining own technology capabilities and avoiding one-sided dependencies (outsource).

By having IRS, you own the Infrastructures and you can develop your own registry system.
Pros

• Direct system access to your employees
• Ability to build an In-House organization culture
• Personal involvement and capacity building
• Increasing credibility in your organization profile

Cons

• High cost (for initial cost)
• Team management and hiring are handled by you
• Lack of versatility
• Investment in skills development
Outsource

Infrastructure on Premise

Your Own Infrastructure + Outsourced Registry System

**Pros**
- Meet government requirements (Indonesia)
- No recruitment hassle
- Get the expertise that you lack
- Focus on urgent tasks

**Cons**
- High cost
- You aren’t in direct control and/or can’t reach the team in person
- Different time zones
- Security threat
- Commitment

SaaS (Software as a Services)

Outsourced Infrastructure + Outsourced Registry System

**Pros**
- Cost-efficiency
- No recruitment hassle
- Get the expertise that you lack
- Focus on your urgent tasks

**Cons**
- You aren’t in direct control and/or can’t reach the team in person
- Different time zones
- Security threat
- Commitment
Do we need IRS?
Do we need IRS and Sovereignty? General

1. Analyze whether a technology is currently critical
2. Differentiate precisely in which functional context a technology is critical.
3. In the final step, we consider the factors needed to produce technology sovereignty.
1. Do you have expertise in DNS, Programming, Database, System Administration, Networking, Security?
2. Do you have 24x7 Monitoring team?
3. Do you have enough capital budget? (It will be costly, but in a long run it will reduce the system cost)
4. Do you want to maintain full control of your projects?
5. Do you want to have a unique and outstanding product that meets all your expectations?
6. Do you want to keep your product updated and optimized?
Do we need IRS? Benefits

- Suitable technology for long term purpose
- Reducing Cost
- Human Resources Improvements
- Registrars Qualification to meet the New Standard
- Flexible customization
- Full and direct control
- Technology Sovereignty
How to implement IRS?
1. Requirement Identification in-House Registry System
2. Human Resources: Existing Staff and Hire New Staff (IT Field)
3. Prepare Technology and Infrastructures
4. System and Database Migration
5. Bug Fixing after Migration on Production System
6. Create Three Different System: Development, Sandbox and Production
   ▪ Internal Testing (dev)
   ▪ Registrar Testing (sandbox)
   ▪ Live (Production)
7. Bug fixing (Feedback from customer and internal)
Thank you