Technical side of
ASYCUDA World
Implementation
in SRI LANKA Customs

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Implementation platform and
network structure

- Implementation platform
  Perimeter Firewall – Checkpoint Cluster
  Server – HP blader server system
  Storage – HP Storage

  Operating System – Oracle Linux Enterprise 6.3
  Database System – Oracle 11g Standard Edition

- Network
  VPN clients for brokers
  Remote sites are connected via VPN links
**Strategy to maintain and sustain the communication infrastructure**

- Two telcom providers for communication network with 24 * 7 support
- Most major devices like core switches and firewall with redundancy. Those are maintained by companies with 24 * 7 support
- Customs Officers are trained for network maintenance.
Status and experience of integrating Other Government Agencies
- With ASYCUDA++

- Government Banks connected for CUSDEC e-payment.
- Separate Application Developed for Ministry Finance Licenses
- Main problem is no ICT Systems for OGA.

Status and experience of integrating Other Government Agencies
- With ASYCUDA World

- Separate AW module developed for Tea Board Approval.
- Ministry Finance with Reg app
- Trying to integrate with ASYCUDA
- Discussion going on with some agencies

Challenges
- Changing the procedures and laws.
- No IT system
Subsystems within Customs development

- Cargo Controle
- Warehouse System
- Remittance Management System
- Reg App System
Database Structure

- Use Oracle standard edition since 1999
- Maintain few databases since 1999
- AW oracle RAC with two nodes
- Planning to move to Oracle Exadata
- We use sql server for other application (with integration of other models to AW all data will be in oracle)

Disaster Recovery Options

- Redundancy for all critical hardware including network devices.
- Backup communication lines for all remote sites.
- Take online backup everyday.
- Standby AW Server is ready with backup database.
- Working forward to implement Disaster Recovery Site.
Technical problem faced and mitigation measures adopted

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
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<tbody>
<tr>
<td>• Critical AW issues which can hinder operations</td>
<td>• All the critical AW issues identified before we put them into operation</td>
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<tr>
<td>• Critical AW issues which can hinder operations</td>
<td>• Some are identified with pilot sites.</td>
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<tr>
<td>• DTI Users issues</td>
<td>• Initially visited their sites and gave solutions.</td>
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<td>• Data grows rapidly and poor response on Oracle Database</td>
<td>• Later we connected their pcs using team viewer.</td>
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<tr>
<td>• Data grows rapidly and poor response on Oracle Database</td>
<td>• Change Oracle Data File Storage to ASM and introduce Oracle Cluster</td>
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<td>• Poor response for some AW actions</td>
<td>• Identified the Oracle Tables and created indexes.</td>
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Technical problem faced and mitigation measures adopted

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<tr>
<td>• AW Users got login issues when more users are connected</td>
<td>• Linux kernel parameters has to be adjusted</td>
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<td>• AW application server gives poor responses for Users</td>
<td>• JVM Parameters adjusted</td>
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<td>• Giving access to all banks for e-payment</td>
<td>• A central payment agency</td>
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<td>• Many ASYCUDA Databases</td>
<td>• Separate Stat reports developed</td>
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THANK YOU