

# ASYCUDA World Operations in Bangladesh

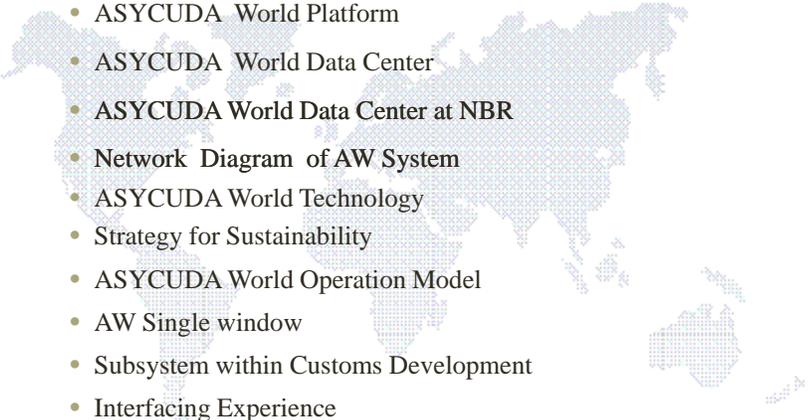
A Presentation on  
**ASYCUDA World Implementation**  
( AW Technical Side)

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Bangladesh Customs



## Outlines.....

- Introduction of ASYCUDA
- ASYCUDA World Platform
- ASYCUDA World Data Center
- ASYCUDA World Data Center at NBR
- Network Diagram of AW System
- ASYCUDA World Technology
- Strategy for Sustainability
- ASYCUDA World Operation Model
- AW Single window
- Subsystem within Customs Development
- Interfacing Experience
- Technical Problem Faced and Mitigation



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## Introduction of ASYCUDA

- Automated System for Customs Data: Technical Assistance Program of UNCTAD
- Created in the early 80's
- Four generations of ASYCUDA IT platforms
  - Ver1, Ver2, Ver3/A++, ASYCUDA World
- Operates in 90 Countries using 19 Languages
- Major User Countries:
  - **Asia & Pacific:** Bangladesh, Philippines, Cambodia, Vietnam, Sri Lanka, Nepal, Maldives, Fiji, Iran, Jordan, Syria, Lebanon
  - **Europe:** Albania, Malta, Moldova, Kosovo, Romania, Latvia, Lithuania, Georgia
  - **Americas:** Barbados, Haiti, Cuba, Venezuela, Bolivia, Nicaragua, Panama, Honduras
  - **Africa:** Nigeria, Namibia, Cameroon, Tunisia, Zimbabwe
- 58 countries using ASYCUDA World

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## ASYCUDA World Platform

- ☐ 3-tier Model – Oracle Engineered System ( EXADATA )  
(Storage, Database Server, Network)
- ☐ AW Application Server – Oracle Server  
Oracle Linux (OS)  
Middleware ( SOClass 2.2.15)  
ASYCUDA World v4.2.1RC
- ☐ Database – Oracle 11g  
Enterprise Manager 12c
- ☐ Web Server – Dell Server  
RED Hat Linux (OS)
- ☐ Network – CISCO Platform  
Hybrid Topology  
2 Network Backbone Country Wide Established

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# ASYCUDA World Data Center

## DC, Dhaka



## DR, Ctg



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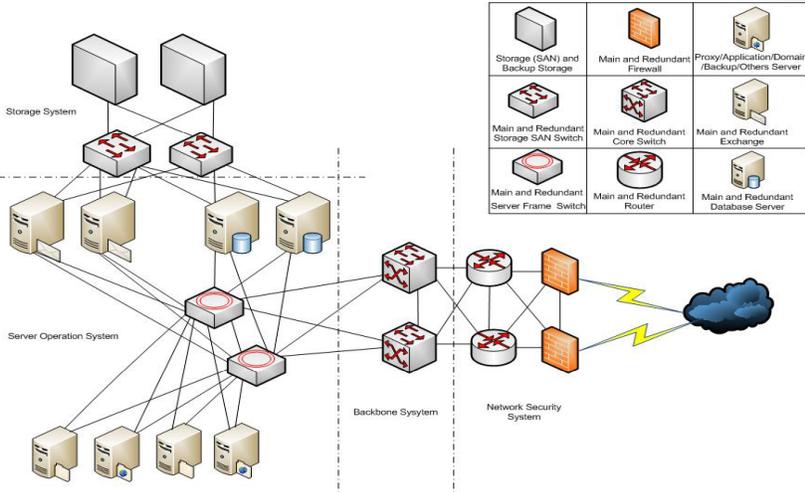




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# ASYCUDA World Data Center at NBR



Storage (SAN) and Backup Storage	Main and Redundant Firewall	Proxy/Application/Domain /Backup/Others Server
Main and Redundant Storage SAN Switch	Main and Redundant Core Switch	Main and Redundant Exchange
Main and Redundant Server Frame Switch	Main and Redundant Router	Main and Redundant Database Server

Data Center (NBR Building, Dhaka)

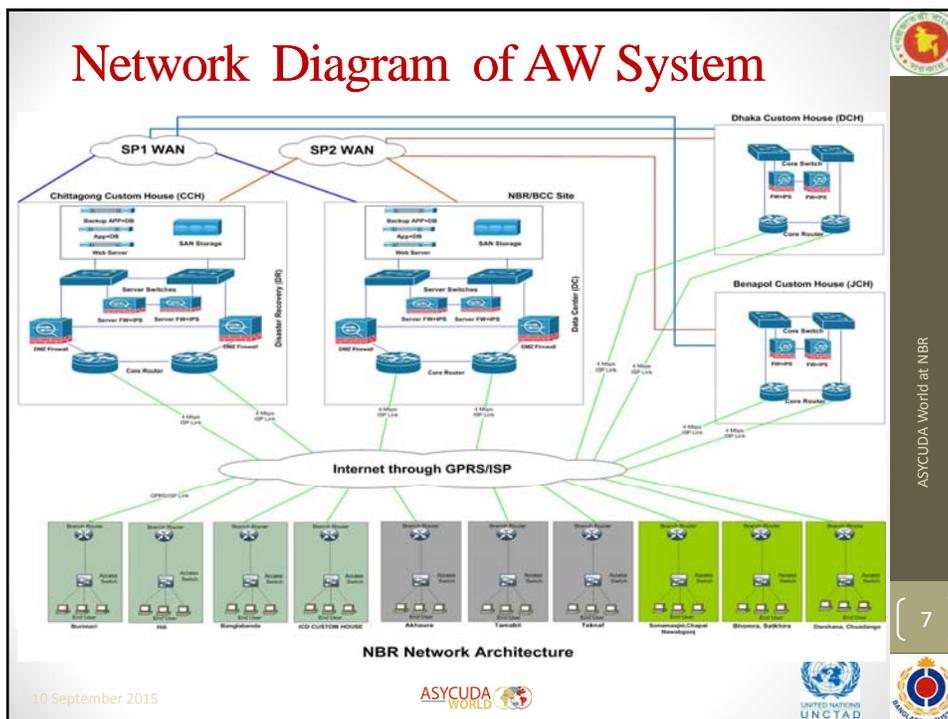
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## ASYCUDA World Technology

- **JAVA** [OS independent: **LINUX, UNIX, Windows ...**]
- **DB Independent** [**Oracle, Informix, SQL Server ...**]
- State-of-the-art **security** model based on asymmetric cryptography, Public Key Infrastructure [PKI] and *e*-certificates
- **Internet** client-server *n*-tier model
- Support from high end to low end Internet clients
- Hierarchical Document Object Model [DOM, **XML ...**]
- Resilience to telecom breakdowns, mobile computing
- Dynamic [**no cost**] deployment

3 5 1 4 2  
Physical Interface Logical Interface Visual  
Representation Representation (DOM) Representation

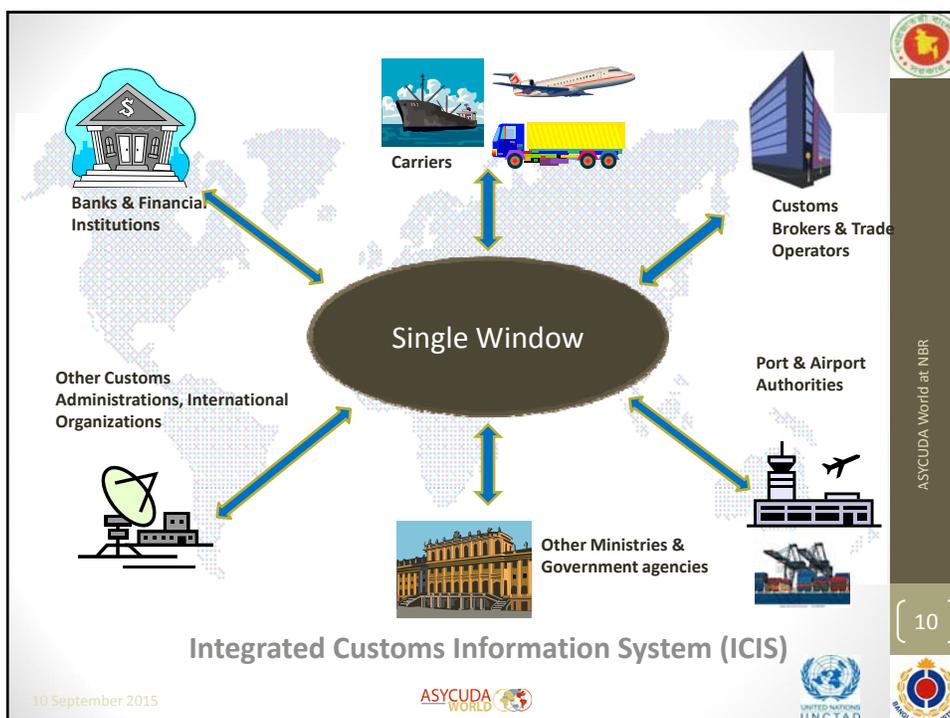
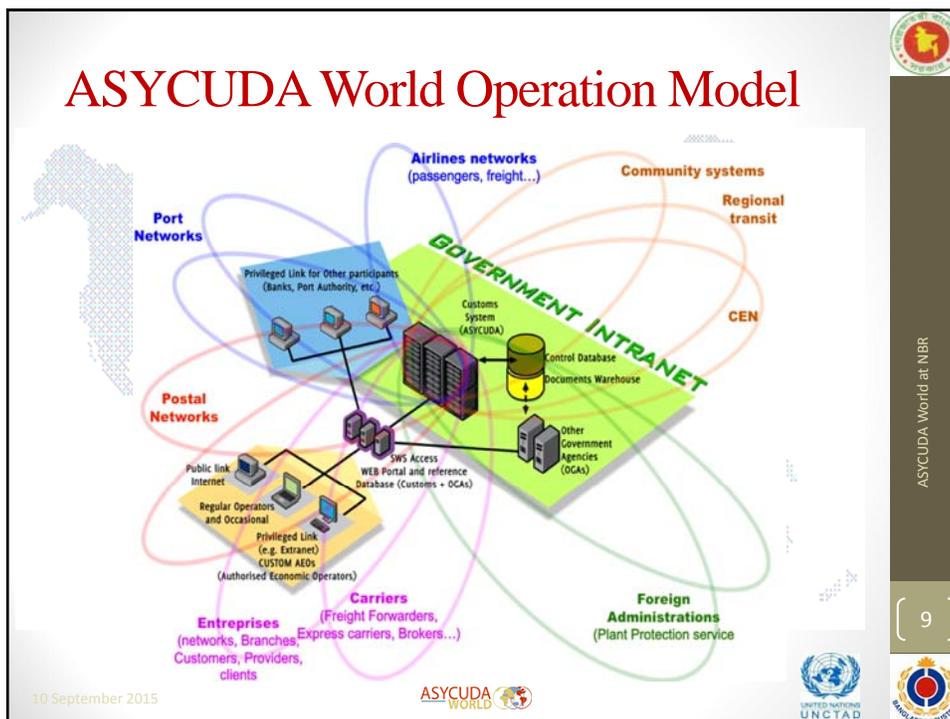
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ASYCUDA WORLD

UNITED NATIONS  
UNCTAD

ASAC

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## Subsystem within Customs Development

- DG feature for Navy interface.
- Interface to send manifest information to Chittagong port
- BIN (Business Identification Number) entry interface for VAT officials
- Auction module will be develop and there will be interface between AW system and auction module
- Bond module will be develop and there will be interface between AW system and Bond module
- There will be another subsystem for scanned image processing.

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## Interfacing Experience

- Interfacing between ASYCUDA and Chittagong port is one way i.e. port only received manifest data from AW system .
- Interfacing with Govt. agencies like BSTI, BRTA, Bangladesh Bank, EPB, Drug Administration, Quarantine, Atomic Energy Commission are under process.
- Some stakeholders like Bangladesh Bank are ready for interface, but most of the other agencies are not ready for interfacing to their ends.
- For interfacing with some other non-govt. agency are also under process. Those are mainly BGMEA, BKMEA, EPZ etc.

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## Technical Problem Faced and Mitigation

- ❑ As there are almost 12000 bill of entry/export are process centrally per day, so there is hies traffic movement between client and server.
- ❑ Sometime concurrent users are more than one thousand
- ❑ To catar hues number of users sometimes server become slow and some records are locked for long time
- ❑ To mitigate this problem NBR IT team local network vendor, local bandwidth vendor, Oracle expert works together
- ❑ The whole team find out that sometimes bandwidth is not stable fluctuate within high range
- ❑ Also sometime AW can not release locked B/E , Payment order etc instantly.
- ❑ NBR IT team , UNCTAD and local expert will work together to mitigate the problems.

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# Thank You

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