



# Integrating CORBA and Web Services

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# Agenda

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- ✦ Why bother?
- ✦ Basic integration overview
- ✦ More complex scenarios
- ✦ Challenges
- ✦ Summary
- ✦ Q & A



# Why Bother

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- ✦ Web services are very similar to existing technologies:
  - SOAP ↔ Java RMI, CORBA IIOP
  - WSDL ↔ Java interfaces, CORBA IDL
  - UDDI ↔ JNDI, CosNaming, CosTrader
  
- ✦ So what's the big deal?
  
- ✦ Clearly there's no point in just replacing a stable, mature technology platform with a new, less mature one



# Benefits of Using Web Services

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## ✧ Ease of Use

- Simplifies connectivity between different “worlds”
- CORBA, J2EE, .NET, etc.
- Easier to build front end with simpler tools
  - Visual Basic, etc.

## ✧ Ubiquity

- Widespread adoption of web services
  - Platform vendors (Microsoft, Sun, IBM, Oracle, ...)
  - Application vendors (SAP, PeopleSoft, ...)

## ✧ Opportunity: reuse existing deployments

- Expose existing systems as web services



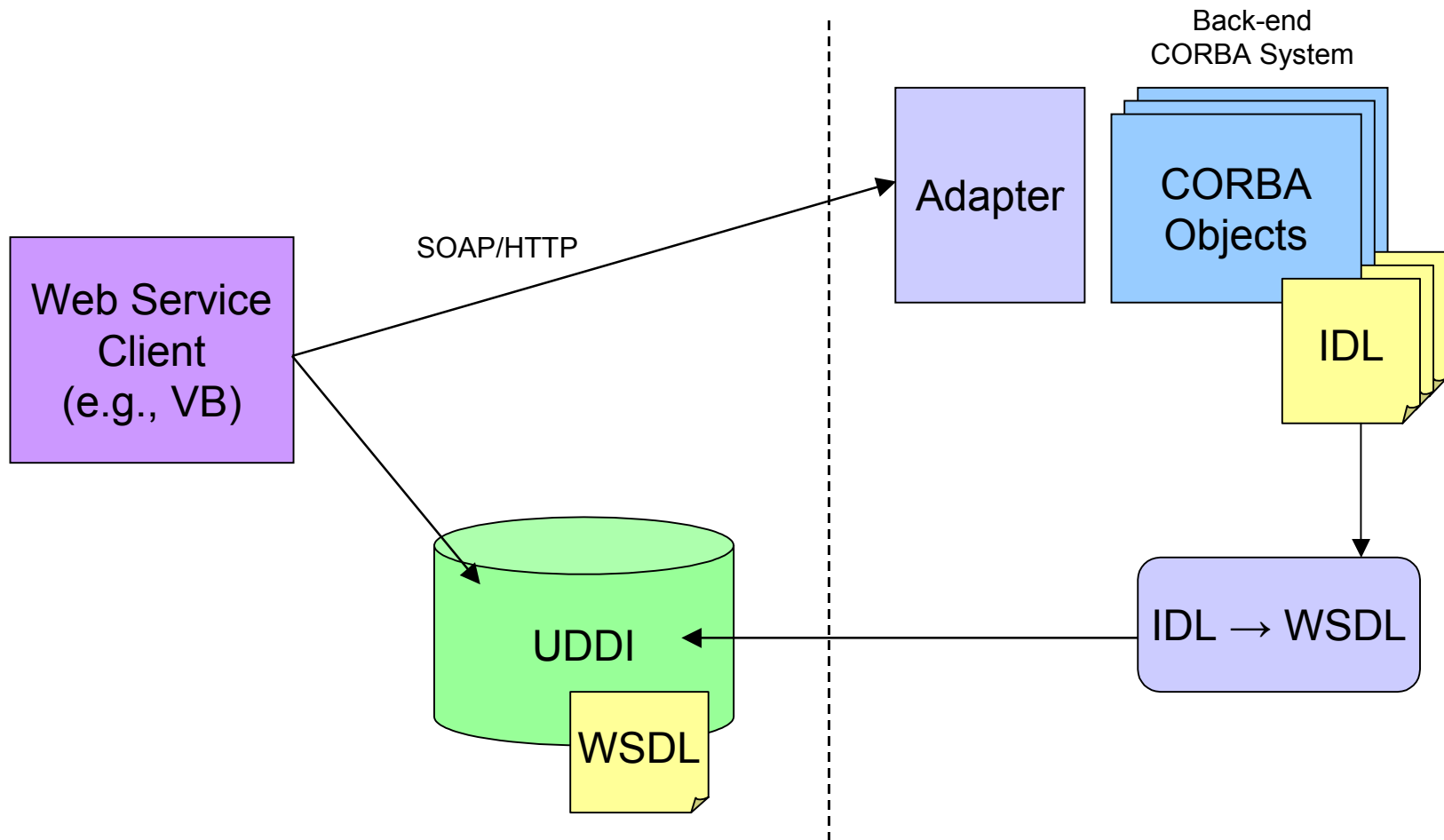
# CORBA/Web Services: Basic Integration

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- ✧ Goal:
  - Expose CORBA objects as web services
  
- ✧ Need to:
  - Map IDL to WSDL (“development”)
  - Map SOAP to IIOP at run-time (“deployment”)
  
- ✧ It’s for real:
  - A lot of real projects doing this right now
  - Typically solving wider integration problems:
    - CORBA/.NET; CORBA/J2EE/.NET



# CORBA/Web Services: Basic Integration





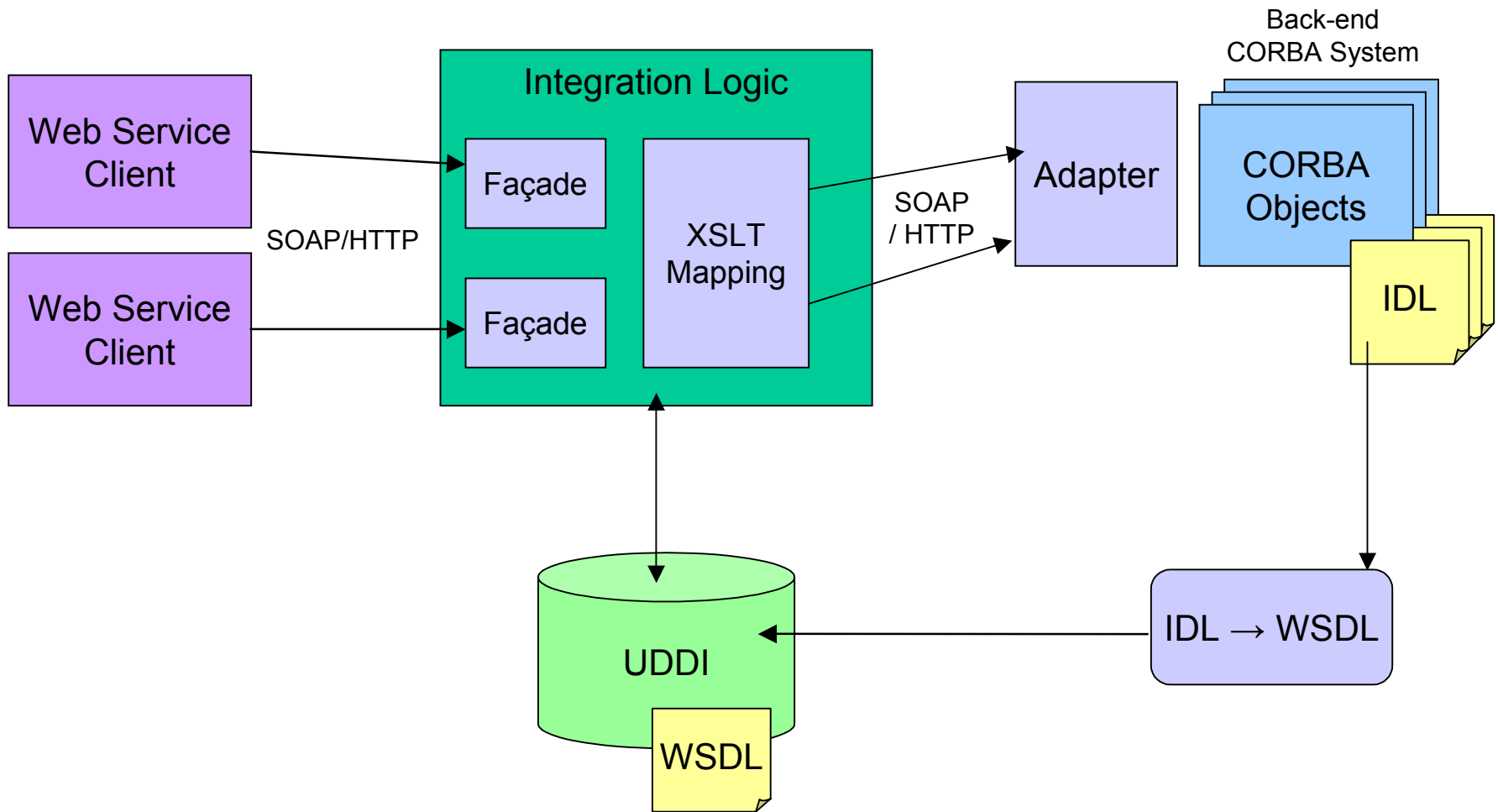
## Not a bad first step, but...

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- ✦ Naïvely exposing IDL is bit crude
  - Probably not designed to be used as web services
  - Web services tend to be coarser-grained
- ✦ Need ability to customize
  - Façade objects / interface mapping
- ✦ XSLT provides powerful mapping for XML
  - WSDL/WSDL mapping can implement façades
  - Simpler to deploy than wrapping at the IDL level



# More complex integration





# Benefits

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- ✧ No need to redeploy back-end systems
  - Customization is handled in web service domain
  
- ✧ Simpler tools
  - XML tools tend to be easier to use than CORBA ones
  - Broader developer base
  
- ✧ Do customization nearer to the end-user
  
- ✧ Single model for N-way integrations
  - e.g., SAP + CORBA + .NET + J2EE



# Challenges

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- ✦ Web services aren't fully mature
  - Especially around basic services like security
- ✦ Platform wars will probably resurface soon
  - E.g., Hailstorm versus Liberty Alliance
- ✦ Still... they won't go away anytime soon
  - Integration opportunities / pressures
- ✦ Opportunity:
  - stable platform (CORBA) for core services, web services for integration



## Contact Details

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