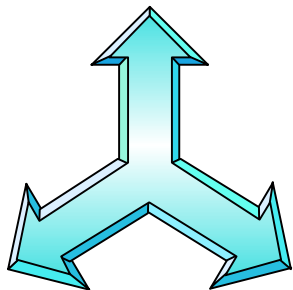# Automated Negotiation Overview

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Outline

- Partner profiles
- Creation of a Collaboration Protocol Agreement (CPA)
- Automation of CPA life cycle
- Automated CPA negotiation
- Future

Partner Profiles

- Profiles can be placed in public repositories
  - ebXML Repository
  - Discovery of prospective business partners
- Business description
  - Products or services
  - Prices, volumes, shipping times, etc.
  - What is negotiable
- Collaboration Protocol Profile (CPP)
  - Supported business processes, communication protocols, etc.

Collaboration Protocol Agreement (CPA)

- Agreed IT properties for performing business collaboration
- Intersection of 2 parties' CPPs
  - Properties in common to both parties
  - Security, communication protocols, etc.
- Creation of CPA
  - Compose initial draft by combining CPPs
  - Negotiate some details

Project Goal

- Automated negotiation of CPA contents

Automation of CPA Life Cycle

Discovery/Negotiation based on partner profiles

- Services advertisement and discovery
  - Repository of partner profiles, query capability
  - Discovery and negotiation services
- Negotiation of business parameters
- Automated negotiation of CPA details between partners
  - Automatically build CPA from CPPs
- Deploy copies of negotiated CPA at partner sites
- Do business

Future: spontaneous e-commerce

Components of Negotiation Process

- CPP of each prospective partner
- Negotiation Descripter Document (NDD) of each prospective partner
  - What is negotiable in each CPP
- Negotiation CPA (NCPA)
  - Common IT properties for automated negotiation
- Negotiation protocol description
  - Based on ebXML Business Process Specification Schema
  - Negotiation verbs
  - Choreography of negotiation messages

Negotiation Configurations

- One on one between prospective trading partners
  - NCPA between the two prospective partner
- Negotiation intermediary
  - Each prospective trading partner has an NCPA with the intermediary

Automated Negotiation Process

- Initial inputs
  - CPPs of two prospective partners
  - NDDs of two prospective partners
  - NCPA
- Offer, counter-offer information in business messages exchanged by business transactions
- Successful result is a CPA

Next Step

- Move upward to application domain
  - Business/legal terms and conditions
  - Business parameters (price, quantities, etc.)

Summary

- Overview of negotiation in CPA composition
- Automated negotiation leads to spontaneous e-Business.
- Negotiation protocol defined as business process
- Negotiation may be one on one or through intermediary
- First step: automated negotiation of CPA
- Later, move up value chain from CPA composition to business-level information