SOA 2.0 (ED-SOA)
Event Driven Architecture Concepts

SOA and EDA
- The fusion of SOA and EDA into ED-SOA
- Combining events and services
- Business rule processing
- Transforming messages
- Solicit-Response
- Different ways of thinking about problem solving
- WS-Eventing
- Potential overlap between SOA and EDA
- Standardizing event processing rules

Fundamental EDA Characteristics
- Decoupled interactions
- Publish/Subscribe messaging
- Many-to-many communications
- Event-based triggers
- Asynchronous interactions
- How does ED-SOA support faster responses?

Event-driven Architecture
- Event processors
- Using a dashboard
- Event monitoring
- Event infrastructure
- Propagation of events
- Kicking off a business process

SOA Action Framework
- Triggering actions
- Subscribing to an event
- The ESB and event propagation
- Complex event processing
- Event consumers
- Event producers
- Storing and forwarding events
- Facilitating system responsiveness

Event processing Styles
- Simple processing
- Handling real-time flow of work
- Reducing lag time and cost
- Stream processing
- Real time flow of information
- Enabling in-time decision making
- Complex processing
- Inferring event occurrence
- Event correlation
- Sophisticated event interpreters
- Responding to business anomalies

Enterprise Service Bus (ESB)
- *Standard-based connectivity*
- Transport services
- Message routing capabilities
- Message transformation features
- Event services
- Mediation capabilities
- Protocol mediation
- Content mediation
- Configuring a simple ESB solution
- Pervasive integration
- Reliable integration

WS-Eventing
- Delivery modes
- Subscription managers
- Notations and terminology
- Subscription messages
- Notifications
- Faults
- Security considerations
- Message security
- Access control

Complex Event Processing (CEP)
- CQL - Complex Query Language
- Event Attributes or properties
- Granularity of events
- Using timestamps
- Creation time and arrival time
- Event processing language (EPL)
- Event processing agents (EPA)
- Composite events
- Derived events
- Event source and event channel

SOA event Patterns
- Discovering event patterns
- Commands
- Queries
- Event pattern monitoring
- Monitoring for control of process execution
- Event cascade
- When to use event patterns
- Event sourcing
- Structuring the event handler logic
- Reversing events

SOA events and the SLA
- Importance of a Service level agreement
- Keeping services within the agreement
- Instances violating the SLA
- Priority for executing risk assessment steps
- Building autonomous processes
- Monitoring and event pattern triggering
- Dependence between events

Software Platform for ED-SOA
- Software Tools for ED-SOA
- Event-optimized runtimes
- Supporting bulk application of rules
- Dynamic data-driven event definition
- Agents and streams
- Guaranteed pause times
- Sensors and event-processing agents
- Responders

Conclusions
- Building of processes facilitated by ED-SOA
- ED-SOA constructed using BPM
- CEP principles as component of ED-SOA
- The increasing quest for control of BP
- Real time autonomous operation
- Gathering business intelligence from events
- The way of the future

Genuine Belgium
www.genuine.be
Tel +32 (0)15.76.00.65

Genuine UK
www.genuine.uk.com
Tel +44 (0)7907.568.105

Genuine France
www.genuine.fr
Tel +33 675.670.751