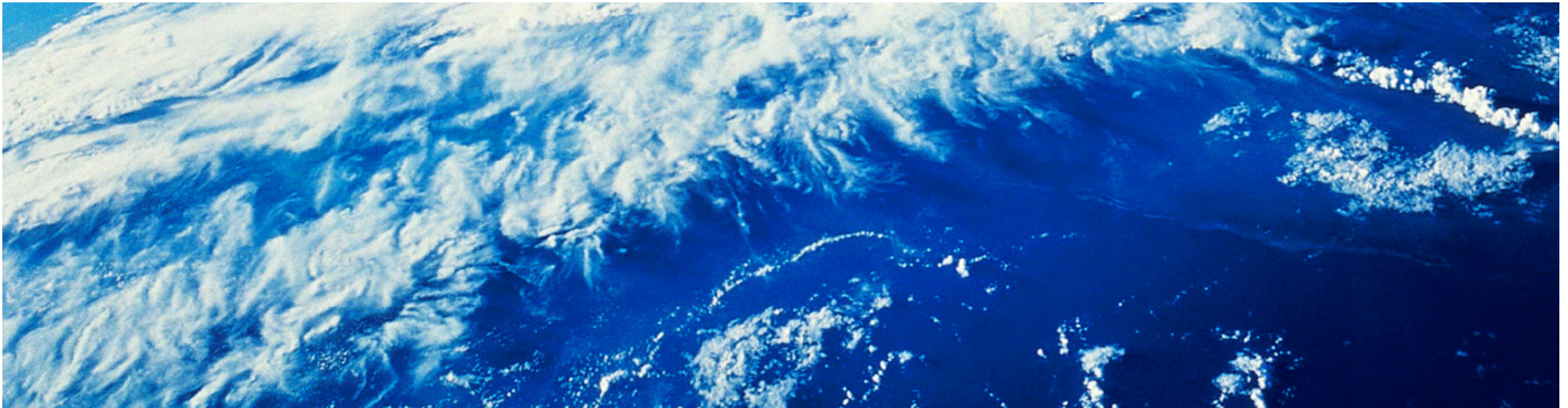

IBM WebSphere Commerce V7 FEP7

REST Enhancements



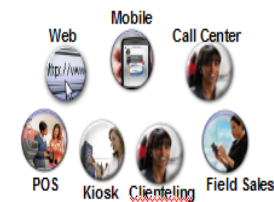
Agenda

- Introduction
 - Overview of FEP7 REST Enhancements
 - REST Infrastructure
 - REST Performance
 - REST Consumability/Interoperability
 - REST API Coverage
- Customization
- Limitations
- Troubleshooting

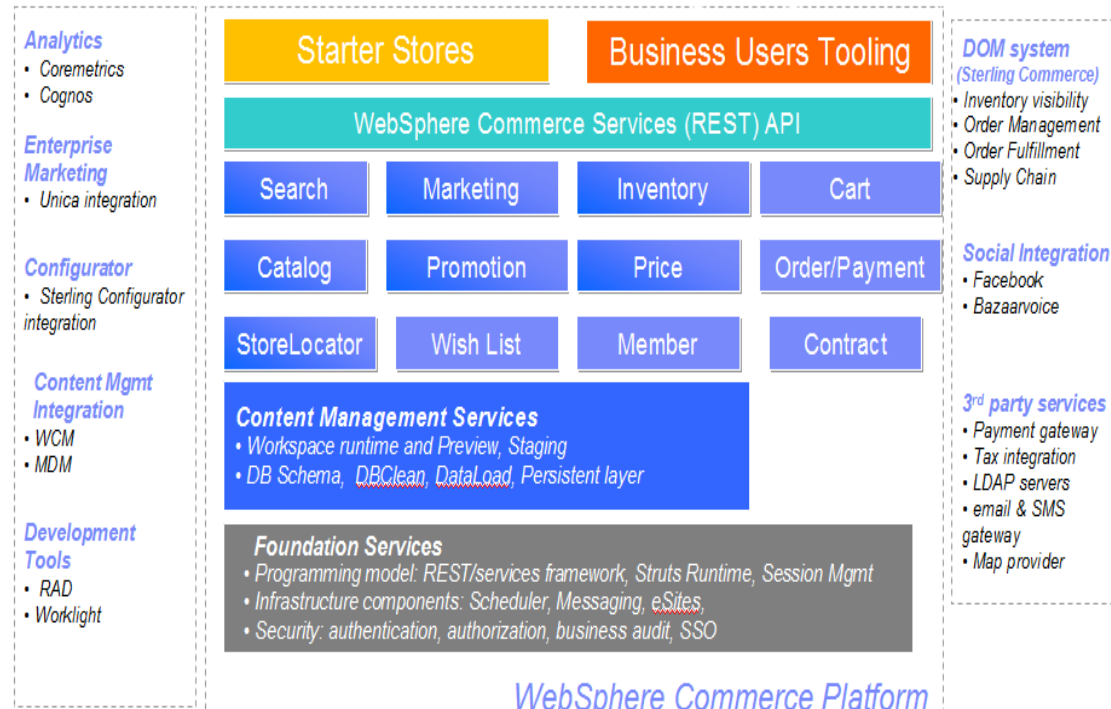
Introduction – Overview of FEP7 REST Enhancements

- **Goal:**
 - Strengthen REST API coverage, performance and consumability and align with smarter commerce strategy
- **Requirements from Customer and Partner feedback**
 - Infrastructure
 - Performance
 - Consumability
 - REST API Coverage

Cross Channel User Experience



Optimized Business User Experience



Customer and Partner feedback on REST infrastructure

- **“As a Commerce application developer, I want to be able to build REST services on top of Commerce and custom classic controller command framework”**
 - Current REST is over BOD (SOA/SOI) services
 - Customer is still using traditional programming model including command framework and databean/EJB to develop their assets
 - Provide enhanced REST infrastructure to support REST over controller command and databean
 - Could benefit to many OOTB legacy code too
 - Principles for OOTB REST implementations

Customer and Partner feedback on REST performance

- **“As a Commerce application developer, I am concern about the current implementation of the REST cache filter which does not perform and is not configurable”**
 - Known limitations to current REST cache filter
 - Need to extend RestCacheFilter for cache of new REST APIs
 - Identifier to UniqueID conversion is in high cost
 - After improvements
 - Easy to configure dynacache for new REST APIs
 - Adopt local data cache to fasten ID resolver

Customer and Partner feedback on REST consumability

■ **REST Interoperability**

- REST API support normal web authentication tokens from cookie
- Allow Web and REST session for same user simultaneously
- Support Persistence Cookie (remember me) in REST

■ **REST security improvements**

- Support generic user, guest user, **partial authenticated** customers, authenticated customers

■ **REST error handling improvements**

- Generalize error and exception for rest layer

Customer and Partner feedback on REST API coverage for CMS integration

■ Order/Cart

- “As a Commerce REST application developer, I like to have a straight forward quick checkout implementation”
- Merge shopping carts after REST login (as same as storefront login)
- Support customization fields of order/orderitem in order/cart API
- Lock/unlock order APIs

■ Promotion/Coupon

- As a Commerce application developer, I need the coupon and promotion support in REST services
 - Coupon APIs
 - Get Coupon Wallet
 - Get Coupons from Wallet
 - Delete Coupon from Wallet
 - Get Coupons applied on order
 - Apply Coupon to an order
 - Remove Coupon from an order
 - Promotion Code APIs
 - Get Promotion Codes applied on order
 - Add Promotion Code to an order
 - Remove Promotion Code from an order

Customer and Partner feedback on REST API coverage for CMS integration (cont.)

■ Promotion

- Get promotions on the store, find by name
- Get promotions associated with product or category

■ Marketing

- REST API to support customer segments
 - Get segment for store, search by name
 - Check user is given customer segment (also support personalizationId)
 - Get given user's customer segment (also support personalizationId)
- REST API to support e-Marketing spots
 - Get marketing spots for store, find by name
 - Get marketing spots with search terms associated
- ESpotDataHandler API support more evaluation params
- EventHandler API support more evaluation params

■ Price

- REST API for shopper's entitled contractual prices

Customer and Partner feedback on REST API coverage for CMS integration (cont.)

- New Resource Handler
 - AssignedCouponHandler – CRUD coupons for current cart
 - AssignedPromotionCodeHandler – CRUD promotion codes for current cart
 - AssociatedPromotionHandler – read promotions for current cart
 - CouponHandler – manipulate user's coupon wallet
 - PreviewTokenHandler – generate preview token (FEP6)
 - PriceHandler – retrieve entitled and range prices for a product/contract combination
 - PromotionHandler – retrieve promotion details for a given promotion or a list of promotions
 - SegmentHandler – retrieve customer segment information
 - SpotHandler – read spot details
- Enhanced Resource Handler
 - ESpotDataHandler – read marketing activity data with support of more parameters
 - EventHandler – trigger marketing event with support of more context parameters
 - CartHandler – support quick checkout, cart lock/unlock
 - OrderHandler – support customization fields
 - LoginIdentityHandler – support cart merge during login
- Deprecated Resource Handler
 - ProductViewHandler – replaced by corresponding search API
 - CategoryViewHandler - replaced by corresponding search API

Customization

- Write your own REST API on top of Controller Command or Databean

Limitation

- REST Interoperability currently only support Web to REST
 - REST to Web is not supported

Troubleshooting

- Check HTTP status code and error message in REST response
- Enable trace for the package: `com.ibm.commerce.foundation.rest.resourcehandler.*`
- Verify if error is in REST layer or underlying BOD/Command/Databean layer
 - Then check corresponding component trace/log for further problem determination

References

- WebSphere Commerce FEP7 REST API Reference:
 - http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=%2Fcom.ibm.commerce.starterstores.doc%2Fconcepts%2Fcwvrestapi_fep7.htm

Thank You!

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