New Portal
Reference Implementations & Feedback
DevOps & Open Source
Where are we?
BIAN Portal – Google Analytics
GitHub – Analytics
Service Domain APIs
Model APIs

OVERVIEW
Reference Implementations & Feedback

1. BIAN Semantic Standard
   ➢ Wireframes & Business Scenarios
   ➢ Service Domains
   ➢ Service Operations
   ➢ BCM
   ➢ Semantic API Specifications

2. Semantic requirements expanded for implementation

3. Feedback (BIAN CICD)
   Missing Semantic concepts
   Local variations (package, geopolitical, scale, segment, etc.)

4. Proven & Mapped Implementations

5. Certification?

Component/SOA Implementations
   ➢ Legacy Wrapping APIs
   ➢ New Cloud/Container Based Developments
   ➢ Mapped to Implementation Standards (ISO20022)

Implementation Examples

BIAN-mapped Organization Reference Implementations
   ➢ Mapped to BIAN Service Domains
   ➢ Standards aligned and Commercial Product Specific

BIAN Components

Organization Components
### Where are we?

#### Achievements – 2021

1. **New enhanced API Portal**  
   Reduction of 80% per year on Run costs
2. **Reusable attribute groups**  
   Generation of SD components
3. **New Content – BIAN model**  
   - Service Domains (CRs, BQs, SOs) and APIs – 60  
   - BOMs – Definitions up to Wave 5.  
   - Business Scenarios – including Lending, Payments, Accounting
4. **New CI/CD - Automated end to end process**  
   Time Reduction: 2-3 months to 20 minutes  
   - **End to End, automated process**  
   - New BiZZdesign OpenXml Import/Export  
   - New BIAN Database with all BIAN Artefacts  
   - New API Generator  
   - New Html / Portal generator
5. **New Service Domain APIs – updated with member feedback**  
   - Endpoint grouping by functionality – CRs and BQs  
   - Endpoint path containing functional names of CRs and BQs  
   - Upgrade form swagger 2.0 to OAS 3.0
6. **New Model Access & Feedback APIs - REST APIs with GET endpoints**  
   [https://api.bian.org](https://api.bian.org)  
   - Business Areas, Business Domains, Service Domains (CRs, BQs, SOs)  
   - Business Objects – Classes, Enumerations, DataTypes, PrimitiveTypes  
   - Business Scenarios  
   - Service Domain APIs  
   - Service Domain Html Pages
7. **BIAN Portal Landing Page – Update**  
   - Service Domain API Portal, GitHub, Service Landscape, Practitioner Guide  
   - New: Model Access APIs, Mapping Tool

#### Planned – 2022

- Link between SDs and BOMs
- Wireframes (in BiZZdesign & downstream)
- Definition of additional Service Operations
- Certification components including in CICD
- Feedback  
  - GitHub -> BiZZdesign link  
  - Feedback approval
- Event Message Definitions
- TBA – being researched & explored

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New BIAN Portal  
**2021**  
**Release 10.0.0**

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2 &amp; Q3</th>
<th>Q4</th>
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**Enhancements**  
New CI/CD  
New Service Domain APIs  
New Model Access APIs
BIAN Portal – Google Analytics

Service Domain

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
<th>% Pageviews</th>
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<tbody>
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<td>/</td>
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1. /semantic-apis/ 1,936 (23.65%) 1,652 (24.22%)
2. /semantic-apis/semantic-api-port-al-help/ 517 (6.32%) 448 (6.57%)
3. /semantic-apis/credit-card/ 286 (3.49%) 227 (3.33%)
4. /semantic-apis/account-recovery/ 277 (3.38%) 186 (2.73%)
5. /semantic-apis/payment-initiatio-n/ 157 (1.92%) 118 (1.73%)
6. /semantic-apis/current-account/ 144 (1.76%) 121 (1.77%)
7. /semantic-apis/card-authorizatio-n/ 140 (1.71%) 109 (1.60%)
8. /semantic-apis/party-reference-d ata-directory/ 140 (1.71%) 114 (1.67%)
9. /semantic-apis/account-reconciliation/ 127 (1.55%) 101 (1.48%)
10. /semantic-apis/payment-executio-n/ 112 (1.37%) 91 (1.33%)
11. /semantic-apis/payment-order/ 110 (1.34%) 90 (1.32%)
12. /semantic-apis/customer-offer/ 109 (1.33%) 82 (1.20%)
13. /semantic-apis/party-lifecycle-ma nagement/ 96 (1.17%) 82 (1.20%)
14. /semantic-apis/customer-profile/ 94 (1.15%) 73 (1.07%)
15. /semantic-apis/loan/ 92 (1.12%) 80 (1.17%)
BIAN Open-source – GitHub Analytics

Visitors

1,037 Views 201 Unique visitors

Referring sites

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<th>Site</th>
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<th>Unique visitors</th>
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<tr>
<td>github.com</td>
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<tr>
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<tr>
<td>gikers.com</td>
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<td>ohpen.atlassian.net</td>
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Popular content

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</tr>
<tr>
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<tr>
<td>public/ACFFulfillment.js at m...</td>
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<td>9</td>
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<td>Forks</td>
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<tr>
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</tr>
<tr>
<td>public/release10.0.0 at main</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
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<td>4</td>
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Service Domain APIs

Skeleton APIs corresponding to BIAN Service Domains
(Used to implement BIAN Service Domain [APIs])
Service Domain APIs

Semantic APIs

• One API per Service Domain; each represents a Service Operation.
• API version matches BIAN Release number.
• New key features:
  • Swagger to Open API 3.x
  • API Endpoints are now grouped by the CRs & BQs, to align with the functional aspects of the Service Domain
  • Endpoints reflect SD and BQ specific names and IDs, replacing the generic terms used in previous versions. They also include the Action Term in the path.
  • API Endpoint payloads now mirror exactly, the Service Operation Input / Output parameters as in the Digital repository.
  • View previous versions

This service domain orchestrates a consumer checking/demand deposit account. The typical range of services and fees covers payments and deposits, standing orders, sweeps, liens, check and debit card access.
Account Recovery

This service domain handles the restructuring of a distressed account (loan) after standard recovery procedures have been exhausted.

CR - AccountRecoveryProcedure

POST /AccountRecovery/Initiate
- ICR Initiate the account recovery procedure

PUT /AccountRecovery/(accountrecoveryId)/Update
- Upd Update details of an active account recovery case

GET /AccountRecovery/(accountrecoveryId)/Retrieve
- ReCR Retrieve details about an active account recovery case

BQ - Assessment

PUT /AccountRecovery/(accountrecoveryId)/Assessment/(assessmentId)/Update
- Upr Update the assessment for the account recovery case

GET /AccountRecovery/(accountrecoveryId)/Assessment/(assessmentId)/Retrieve
- RrCR Retrieve details of an active assessment

Key
1. Service Operations
2. Single Service Operation
3. API endpoint
4. Behaviour Qualifier (BQ)
5. BQ Schema in API

Restructuring

AccountRecoveryRestructuringSchedule string
AccountRecoveryCaseRestructuringTaskRecord string
Business Scenario -> Service Domain API

1. Business Scenario
2. Service Connection
3. Service Connection - Detail
4. Service Operation
5. API endpoint

Initiate Advertising Campaign (Message)

- CrCR Create and invoke the advertising campaign management plan
- POST /Advertising/CrCR
- PUT /Advertising/{advertisingId}/Update
- PUT /Advertising/{advertisingId}/Request
- GET /Advertising/{advertisingId}/Retrieve
- PUT /Advertising/{advertisingId}/MarketTracking
Model (artefact) APIs

APIs to access the BIAN Model Data (artefacts)
(Used to access the BIAN Model to use in your tools)
Model APIs

- **One API**
- **Group of endpoints for each type of artefact**
  - Metas – Meta data on the model data – specifically the Organisation and Version.
  - Business Areas
  - Business Domains
  - Service Domains
  - Business Objects
  - Business Object Classes
  - Business Object Enumerations
  - Business Object Data Types
  - Business Object Primitive Types
  - Business Scenarios
  - Scenario Groups – Groups of functionally related business scenarios
  - Service Domain APIs
  - Service Domain Information Html Pages (as in bian.org)

Key Features

- API endpoints and Swagger (OAS3) definition
  - Sandbox: https://api.bian.org:4432/
  - Live: https://api.bian.org/

- Help Pages.
  - Sandbox: https://bian.org/ deliverables/bian-portal/model-api-live-help/

- Postman Collections – for calling the endpoints
Model API – SD Example

1. GET /Metas
   - Response body:
     ```
     [
     {
      "organisation": "BIAN",
      "version": "10.0.0",
      "comments": null,
      "id": 0,
      "uid": "BIAN_Release_10.0.0",
      "name": "BIAN_Release_10.0.0",
      "description": null,
      "status": null
     }
     ]
     ```

2. GET /ServiceDomainsBasic
   - Response body:
     ```
     [   
     {
      "id": 1,
      "uid": "BIAN-10.0.0-EquipmentAdministration",
      "bionId": "c128140b-5261-e911-8237-0693944ba3ce",
      "organisation": "BIAN",
      "version": "10.0.0",
      "comments": null,
      "id": 0,
      "uid": "BIAN_Release_10.0.0",
      "bionId": null,
      "name": "BIAN_Release_10.0.0",
      "description": "null",
      "status": null
     }
     ]
     ```

3. GET /ServiceDomainCharacteristics
   - Parameters:
     - organisation: BIAN
     - version: 10.0.0

4. ServiceDomainCharacteristics
   - ServiceDomainCharacteristics
     - ServiceDomain
       - BusinessArea
       - ControlRecord
         - serviceOperations
           - ®
           - ®
         - ®
     - ®

5. ServiceDomainCharacteristics
   - ServiceDomainCharacteristics
     - ServiceDomain
       - BusinessArea
       - ControlRecord
         - serviceOperations
           - ®
           - ®
         - ®
     - ®
Thank you