Project Extensions for Billing, Revenue Accruals, and more

An NSF Case Study

NSF

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Abstract / Executive Summary

- Use Oracle Projects Extensions to handle complex Billing & Revenue Accrual scenarios with Billing Assignments, control and validate Project setups with Status Verification, and bill on variable dates with custom Billing Cycles. These "hooks" allowed NSF to implement Project Billing in a 20,000+ projects per year environment and are just three examples of solutions available in the Projects suite.

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Agenda

- *NSF International* overview
- Oracle Implementation summary
- Oracle Projects setup/use details
- Project Extensions (3)
- Issues along the way
- Wrap-up / Q&A

NSF International (Overview)

- The Public Health and Safety Company™
- Not-for-profit, non-governmental organization
- World leader in standards development, product certification, education, and risk-management for public health and safety
- Founded in 1944
- Headquartered in Ann Arbor, Michigan
- NSF Mark is recognized around the world

NSF International (Overview)

- Committed to public health, safety, and protection of the environment
- Widely recognized for its scientific and technical expertise in the health and environmental sciences
- Has earned the Collaborating Center designations by the World Health Organization (WHO) for Food and Water Safety and Indoor Environment

Implementation Partner

- Zanett
  - Indiana and Ohio based resources were utilized
- 2 Full time resources (Functional/Technical)
- 1 Part time resource – Advanced Collections
- 1 Part time DBA (a little over 50%)
- On site 4 days per week
- *3 to 4 technical resources from the client*

Who is Zanett

- Our philosophy emphasizes clients generating return on their technology investment in as short a time as possible
- Our culture demands the delivery of a quality product and satisfied customers.
- Partnerships with leading hardware and software vendors:
  – Oracle, Cognos, Microsoft, IBM, HP
- $50 million in revenue, over 200 employees
- Over 250 successful implementations and upgrades
- Serves a wide range of companies
  – Fortune 500 to SMB

Our Oracle Relationship

Z Certified Advantage Applications Partner
- ▪ Systems Integrator for All ERP products
- ▪ Reseller of all ERP products

Z Certified Advantage Technology Partner
- ▪ Systems Integrator for All Technology products
- ▪ Reseller of all Technologies products

Z Certified Oracle Managed Services Partner
- ▪ All ERP and Technology-based solutions
- ▪ Fully-hosted and/or virtual administration

Z Certified Oracle University Partner
- ▪ Reseller of all Oracle Training
- ▪ Training Facilities

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Zanett offices

Philippines - Support

India - Development

Implementation Summary

- Jan 2006 start
- GL, AP, AR, FA, Cash Mgmt
- Advanced Collections
- Project Billing / Costing
- OTL Timecards, Internet Expenses
- Dec 2006 Live with Project Billing (Annual Invoicing)
- Jan 2007 Go Live – remainder
- Jan – Mar 2007 (Q1) Support

"Zanett was able to come in on day one and utilize the Accelerators to get us to process design phase right away. This helped set the tone for the entire project."

Implementation Summary

- 2007 - Fine tuning a number of the Account Generator workflows (for PA integration)

- "Phase 2" list projects underway

- Project Management and Resource Management are both potential additions

- Additional HRMS and CRM pieces are also possibilities

Project Goals

Goals	Objectives
Fully Integrated System	• Remove disparate systems (SQL*Time, FRX, BNA) • Reduce maintenance cost of legacy systems • Implement system that can handle NSF's current and future business requirements • Create refined and seamless interfaces with critical legacy systems (examples: Nucleus, ADP)
Best-of-Breed "vanilla" Implementation (Configuration) Updated Technology Platform and Application	• Build a foundation for improving business processes • Improved business process efficiencies • Reduce future costs and reduce maintenance effort with no customizations • Browser-based system that can be deployed over the Internet • Scalable technical infrastructure • Reduce data redundancy
Empower users with better and faster reporting On Time and On Budget	• Simplified reporting • Improved resource allocation • Minimal scope changes • Timely decision making

Oracle Projects (Setup/Details)

- Over 20,000 projects per year
- Half of projects are pre-bills in December
- Revenue for annuals spread throughout year (monthly) or as task is completed (work).
- Non-annuals billed either at completion or routinely (e.g., special billing dates)
- Non-annual revenue mainly on work completion

Oracle Projects (Setup/Details)

- Transactional Interfaces from other systems
  - Laboratory, Certification, Audit tracking systems
  - Internal feed based on "fixed" charges by date
- PRC: Transaction Interface feeds in "Work Performed"
- All Projects set up as either Work/Work or Work/Event
- Revenue always on "Work"

Oracle Projects (Setup/Details)

- Over 20 Project Types
- Over 10 Project Classifications / Categories
- Over 20 Organizations
- Rate Schedules per Organization
- Driving Auto Accounting by Project Types and Classifications, and Organizations (header level) and Organizations and Service Types (task level).

EXTENSIONS

BILLING CYCLE

REVENUE / INVOICING

PROJECT VERIFICATION

Billing Cycle Extension

- Billing Cycle extension will fire if a User- Defined billing cycle exists on the project
- Executes during Generate Draft Invoice processes (single or range)

Billing Cycle Extension

- $PA_TOP/.../PAXIBCXB.pls
- pa_client_extn_bill_cycle *package (AS IS)*
- Get_Next_Billing_Date *procedure (AS IS)*

```
(    X_Project_ID            IN  Number,
     X_Project_Start_Date    IN  Date,
     X_Billing_Cycle_ID      IN  Number,
     X_Bill_Thru_Date        IN  Date,
     X_Last_Bill_Thru_Date   IN  Date ) RETURN Date
```

- Returning NULL (no date) will skip invoicing

Revenue / Invoicing Extension

- Currently at 7 different rev/inv extensions
  - Pre Bill   (critical for Annual projects)
  - Special Bill
  - Post Bill
  - Pre Rev
  - Special Rev
  - Post Rev
  - Monthly Rev (critical for Annual projects)

Revenue / Invoicing Extension

- Revenue and Invoicing extensions are linked to the project at header or task level
  - NSF: task level only
- Each extension could call a different package and procedure.
  - NSF: utilizing 1 package/procedure at this time
  - May make more modular in phase 2

Revenue / Invoicing Extension

Revenue / Invoicing Extension

- $PA_TOP/…/PAXITMPB.pls
- nsf_paext_pkg *package – CUSTOM*
- event_blrv *procedure – CUSTOM*

```
(   X_Project_ID       IN  Number,
    X_top_task_ID      IN  Number,
    X_calling_process  IN  Varchar2,
    X_calling_place    IN  Varchar2,
    X_amount           IN  Number
    X_percentage       IN  Number….
```

Revenue / Invoicing Extension

- Annual projects are set up as Work/Event projects to handle pre-billing (no Work)

- However, cannot be generating invoices manually – needed automation

- Raise "automatic" Events based on criteria that is mainly driven by dates (Start Date, Special Date, Completion Date)

Revenue / Invoicing Extension

- Utilize standard Oracle APIs in the extensions to raise Automatic Events

- pa_billing_PUB.Insert_event

    (X_rev_amt   => l_amount,

        X_bill_amt   => l_amount,

        X_project_ID   => X_project_ID,

        X_event_type   => l_event_type,

        X_top_task_ID   => X_top_task_ID,

        X_organization_ID => l_project_org....

Billing Cycle Extension

- Event Type setup – *Class* = "Automatic"

Event Type	Description	Revenue Category	Class	Output Tax Code	F
AUTO_APPFEE	Application Fee AutoEv	Application Fe	Automatic		01.
AUTO_AUDITS	Audits AutoEvent	Audits	Automatic		01.
AUTO_BASELINE/	Baseline Audit AutoEve	Baseline Audit	Automatic		01.
AUTO_CERTEXAN	Cert Exams AutoEvent	Cert Exams	Automatic		01.
AUTO_CHEMTEST	Chemical Testing AutoE	Chemical Test	Automatic		01.
AUTO_DESKAUDI	Desk Audit AutoEvent	Desk Audit	Automatic		01.
AUTO_ELECTEST	Electrical Testing AutoE	Electrical Testi	Automatic		01.
AUTO_FINALREP(	Final Report AutoEvent	Final Report	Automatic		01.
AUTO_GLSCONSI	Global Life Science Cor	Global Life Sc	Automatic		01.
AUTO_GOVTPRO.	Government Project - F	Govt Project -	Automatic		01.

Event Types (US Operating Units)

Project Verification Extension

- 7+ extensions caused complexity in project creation
- Which extension(s) can I use?
- Which extension(s) can I NOT use?
- Which extension(s) must I use?
- 1 – Use templates to create projects!

    (NSF requires copy only from templates not projects)

- 2 – Use Project Status process to validate

Project Verification Extension

- $PA_TOP/…/PAXPCECB.pls
- Pa_client_extn_proj_status *package (AS IS)*
- Verify_project_status_change *procedure*
  (X_calling_module   IN Varchar2,
     X_project_ID   IN Number,
     X_old_proj_status_code IN Varchar2,
     X_new_proj_status_code IN Varchar2,
     X_project_type   IN Varchar2,
     X_project_start_date   IN Date….
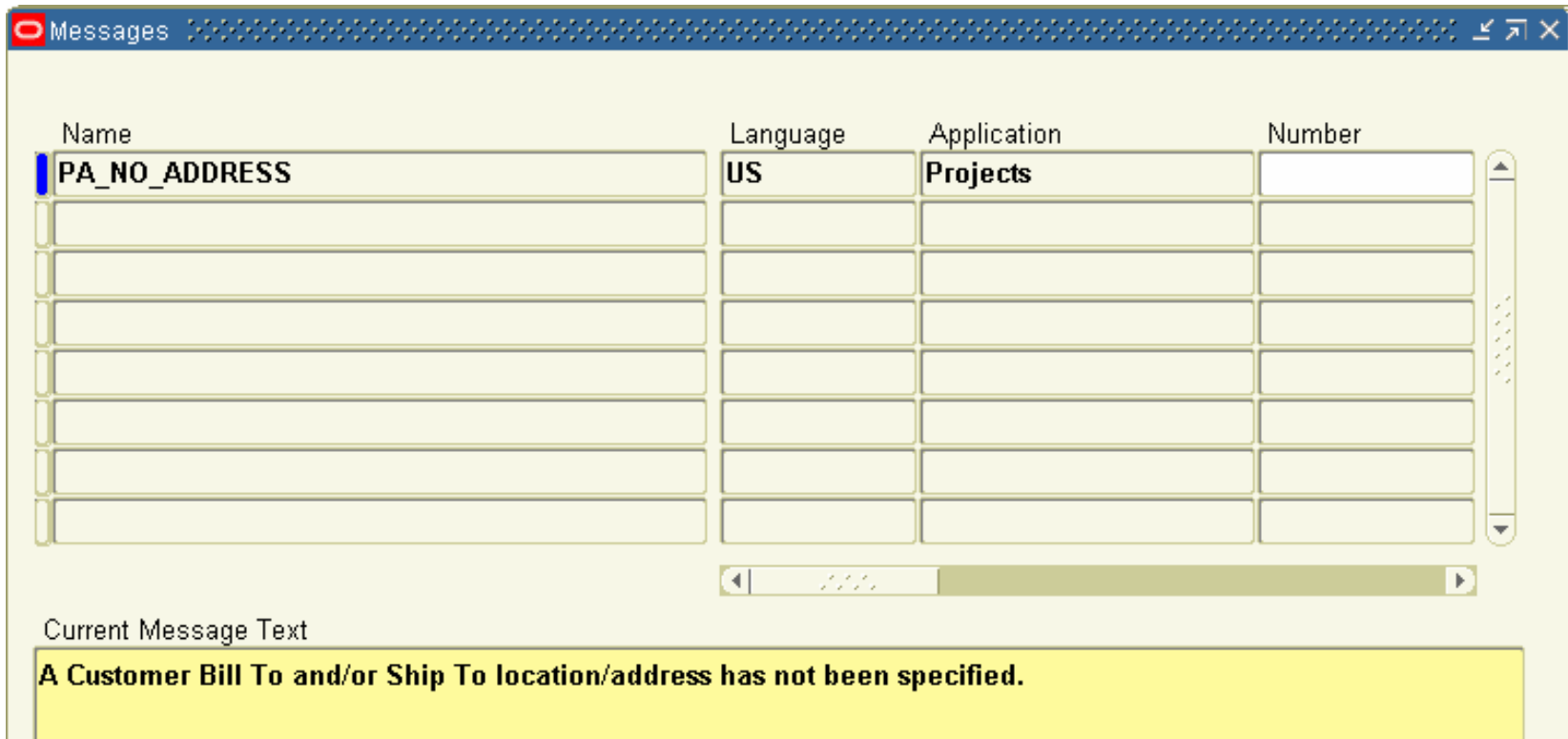
Project Verification Extension

- When Project Status value is changed, extension fires and messages can be displayed to the user.
- NSF validating at the task level so utilized a cursor to loop through all tasks
- NSF validating billing assignment (extensions) along with settings of project types, classification, billing methods (work or event), etc.

Project Verification Extension

- Call a standard (seeded) function to raise messages displayable upon error.

- p_message_name variable will be linked to Apps setup (next slide)

- pa_utils.add_message

```
(   p_app_short_name => 'PA',
    p_message_name  => 'PA_NO_ADDRESS',
    p_token1         => NULL,
    p_value1         => NULL)
```

Project Verification Extension

- Application Developer -> Messages

Issues Along the Way

- Need to derive different AR Trx Types for invoices by criteria instead of default "Project Invoice" for every invoice (Phase 2)

- Need to have more formalized and automated process for PA Credit Memo creation/approval via workflow (Phase 2)

- Billing Cycle extension gap

- Generate Draft Invoices – Single vs. Range

Issues Along the Way

- Billing Cycle extension only fires if an **invoice** already exists (**approved** & **released**)
- This means an invoice is generated immediately upon work being completed (for first generation of an invoice for the project)
- Currently using manual work around
- Will need to beef up reporting in 2007/2008

Issues Along the Way

- *Generate Draft Invoices for a Single Project* not processing exactly as *Generate Draft Invoices for a Range of Projects*

- Single – Deletes and re-generates unapproved invoices and picks up any recent work completed (based on how executed)

- Range – Is NOT deleting and re-generating; if finds an unapproved invoice, skips processing

Issues Along the Way

- *Oracle Recommendation:*
- (1) Run *Delete Unreleased Invoices* process and set parameters to delete all Unapproved invoices
- (2) Run the invoice by range process and should generate since delete already executed

Measurable Goals

- Revenue has increased 11.5% from July '06 (non-Oracle) through July '07 (Oracle).

- Advanced Collections has also helped contribute to an improved cash flow of 8%, July '06 to July '07.

- Even more notable though are efficiency gains from the result of a complete ERP solution.

    - The AP department has seen a 100% decrease in overtime pay and a 13% decrease in hours worked

    - AR has resulted in elimination of a number of redundant/manual processes reducing the need for additional staff, even though business and billings have increased.

    - The addition of the self-service capabilities of Internet Expenses has also reduced administrative headcount by 2 (reviewers) and improved AP turnaround to subcontractors/employees by 3 to 4 days.

    - Projects managed as a whole has increased 6% without adding additional headcount.

- From an environmental standpoint, which is very important to NSF, the implementation of Projects and the invoice approval process within it has reduced paper consumption by 10,000 reams per year.

QUESTIONS?

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(IF AVAILABLE)

LEAVE A BUSINESS CARD IF YOU WOULD LIKE AN
EMAIL OF THE PRESENTATION OR WHITEPAPER

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