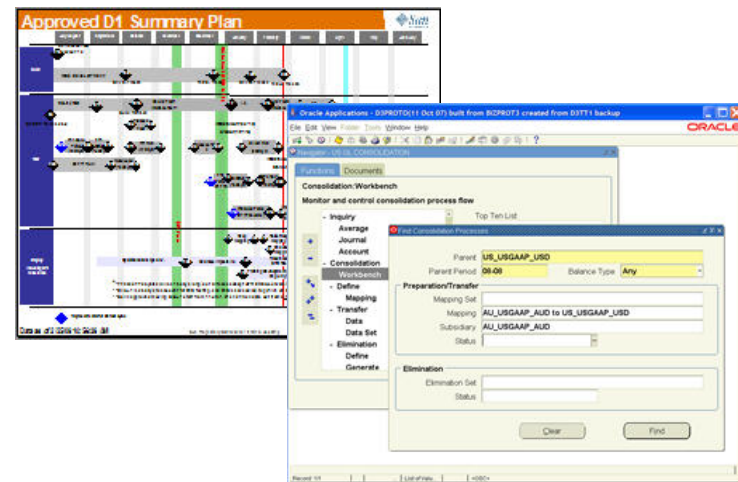


Architecting General Ledger for Global Implementation in Sun Microsystems

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Sun Microsystems Inc.

April 2008



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Agenda

- Intro – Sun Microsystems
- The First Big Bang - Global GL
- Planning and Requirements
- The Legacy Pains
- 11i GL Hidden Treasures
- The Building Blocks
- Shared Services
- The Month End Financial Close
- The Big Five's
- Q & A



Sun Microsystems Inc

- Head Office in US
- Innovator of technologies that powers the internet
- Selling IT hardware, software and services
- Doing business in over 100 countries via local Sun's owned entities and partners channels
- Fiscal 2007 revenue ~ USD13.8 billion
- Business activities including sales, services, manufacturing, partners management, logistics, corporate functions



www.sun.com

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The First Big Bang – Global 11i GL

As part of Sun's global implementation of Oracle 11i (codename IBIS**), the roll out of Oracle General Ledger global implementation occurred in August 2007 covering 58 legal entities with 140 GL books worldwide. The application was diligently architected with the objectives to transform the company's finance organization into a shared service centric structure, ensure corporate accounting standards where met, while continuing to comply with US corporate GAAP and local country GAAP requirements, and meet a tightly knit global month end close schedule.



IBIS stands for Integrated Business Information Solution**

Planning

- Single global instance of Oracle 11i applications
- Phased implementation by modules where GL goes first
- Multi-org design upfront to enable the end state
- Enabling the transition of over 800+ legacy applications to 11i by phases

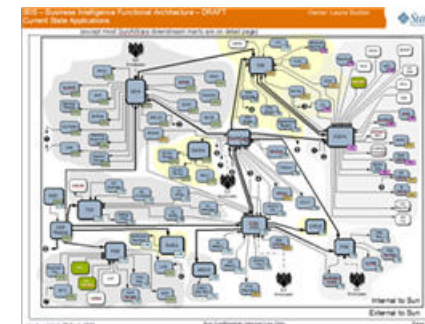


GL Requirements

- Meet US corporate GAAP and local countries GAAP
- Multi-currencies
- Multi-languages
- Audit and SOX control compliance
- Data conversion to enable continuity of financial reporting
- All countries at once
- 14 month implementation timeline

The Legacy Pains

- Multiple legacy Oracle instances
- PC local finance software to meet local countries GAAP requirements
- Multiple charts of accounts
- Custom applications to handle consolidation and elimination
- Too many custom codes and process to maintain, support and understand



Oracle 11i GL Hidden Treasures


- Flexibility in defining charts of accounts
- Multiple Reporting Currency (MRC)
- Global Intercompany System (GIS)
- Journal Approval / AutoPosting
- GL_INTERFACE table
- Security rules
- Consolidation / Eliminations
- Translation / Revaluation







The Building Blocks

Design : Multi-Org Foundation





Each Company → 1 SOB → 1 LE → 1 OU → 1 Inventory

 Business Group – (1) Single Global Group





Americas

-  **SOB:**
 - US & Consolidation = 1
 - Subsidiary = 18
 - Sub Local GAAP = 7
 - Other = 14
-  **Legal Entity = 8**
-  **Operating Units = 8**
OE, AR, PA, PO, AP
-  **Inventory Orgs:**
 - Inventory = 1 Master
 - 2-3 other
 - Spares = 8

EMEA

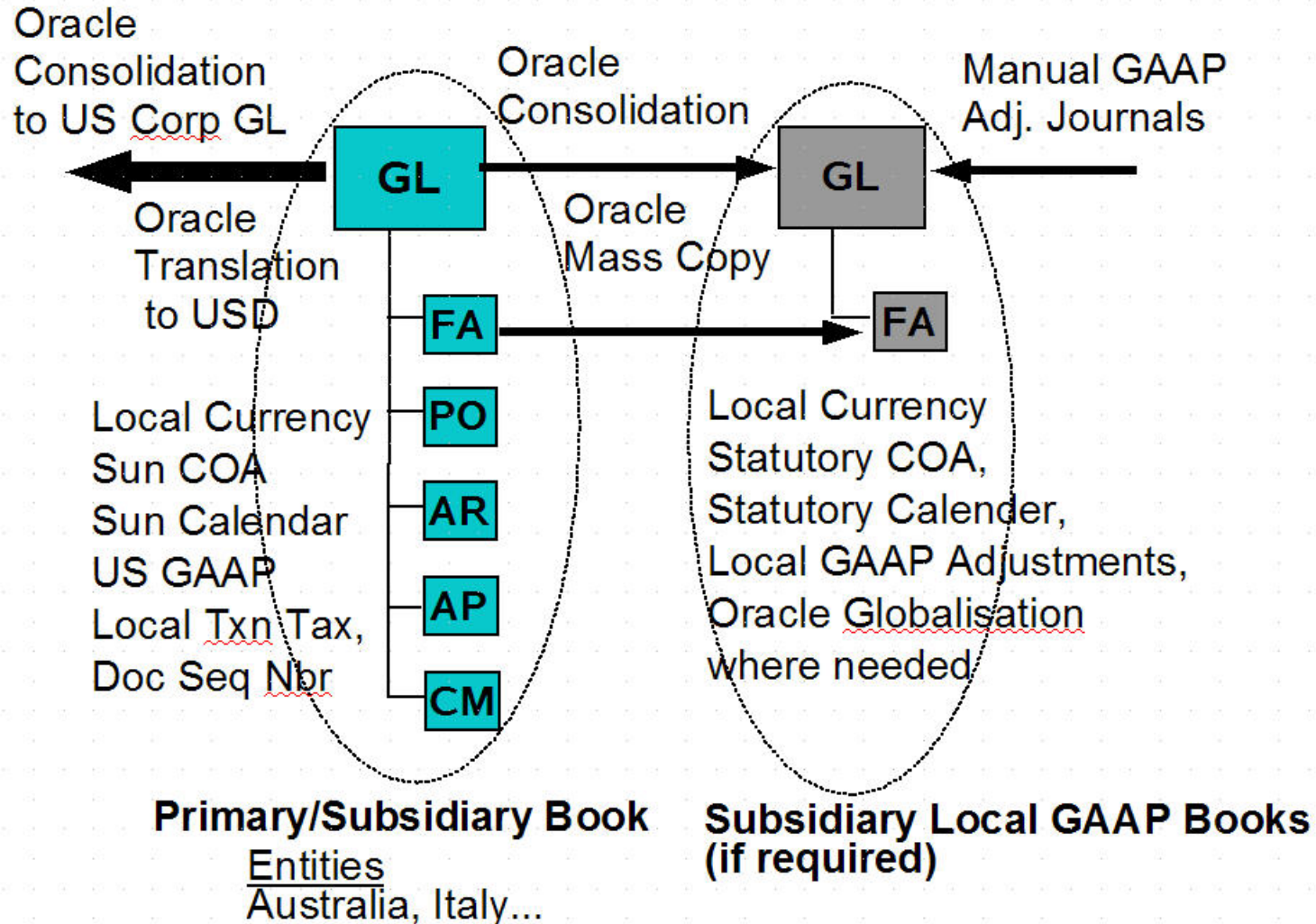
-  **SOB:**
 - Subsidiary = 49
 - Sub Local GAAP = 9
 - Other = 0
-  **Legal Entity = 38**
-  **Operating Units = 38**
OE, AR, PA, PO, AP
-  **Inventory Orgs:**
 - Inventory = 2
 - Spares = 38

APAC

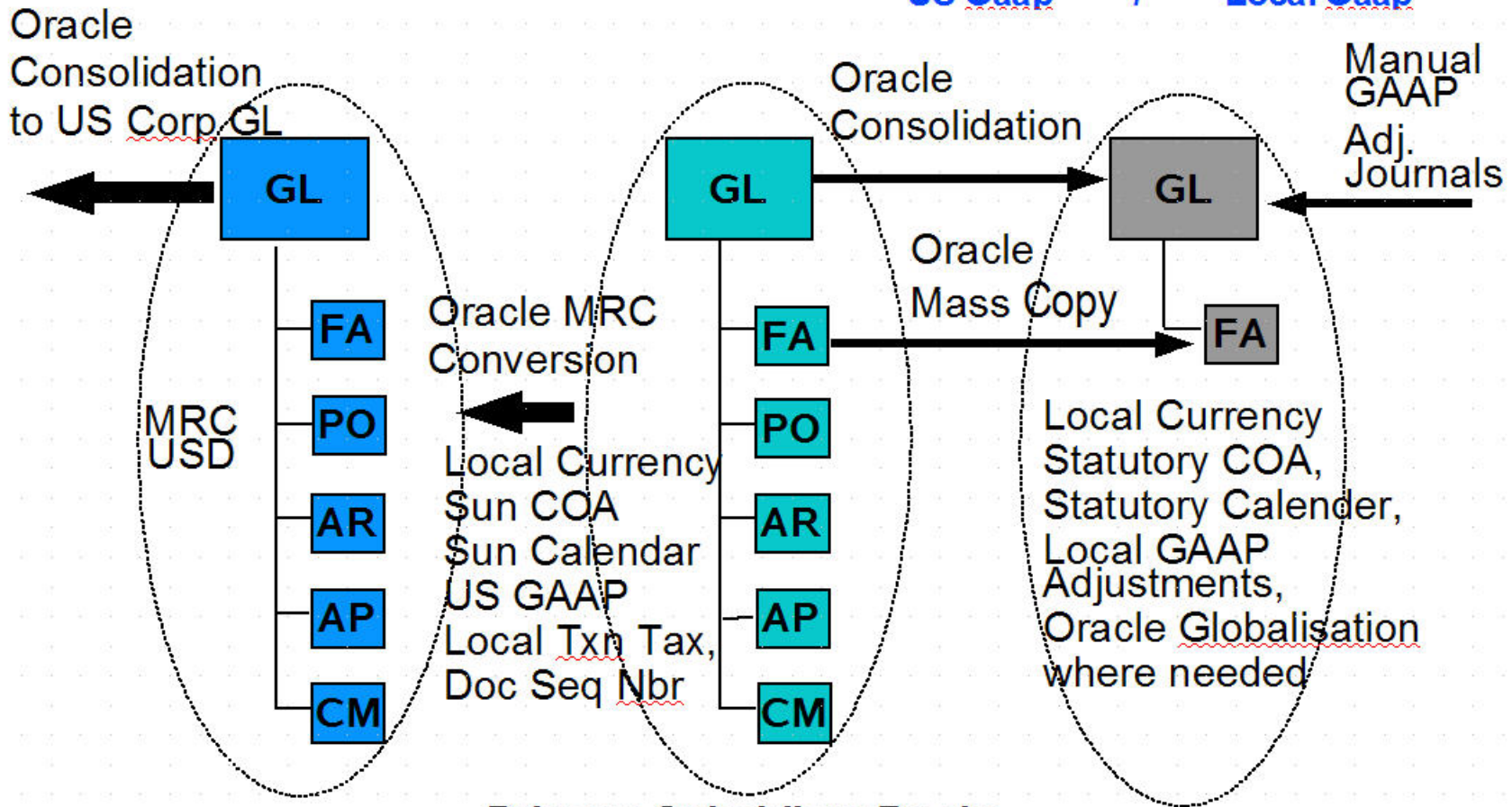
-  **SOB:**
 - Subsidiary = 37
 - Sub Local GAAP = 8
 - Other = 7
-  **Legal Entity = 12**
-  **Operating Units = 12**
OE, AR, PA, PO, AP
-  **Inventory Orgs:**
 - Inventory = 1
 - Spares = 12

Design : Multi-GAAP Compliance Models

MGCM1 (G1) - Subsidiary – Buy-Sell, Local Currency / Local Currency US Gaap / Local Gaap



MGCM2 (G2) - Subsidiary – Buy-Sell, USD Currency / Local Currency
US Gaap / Local Gaap

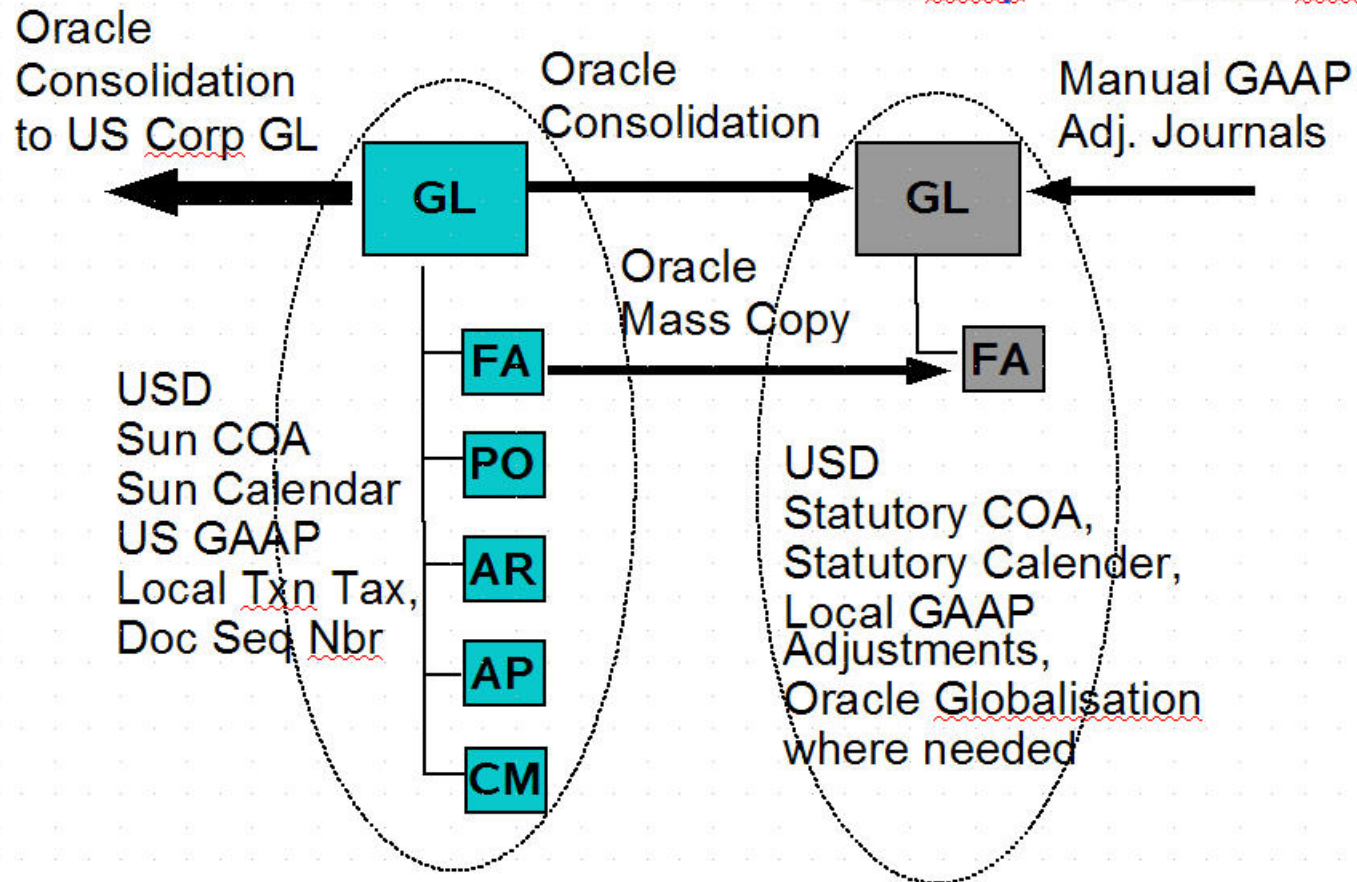


MRC Subsidiary Books

Entities
India, Mexico...

Subsidiary Local GAAP Books (if required)

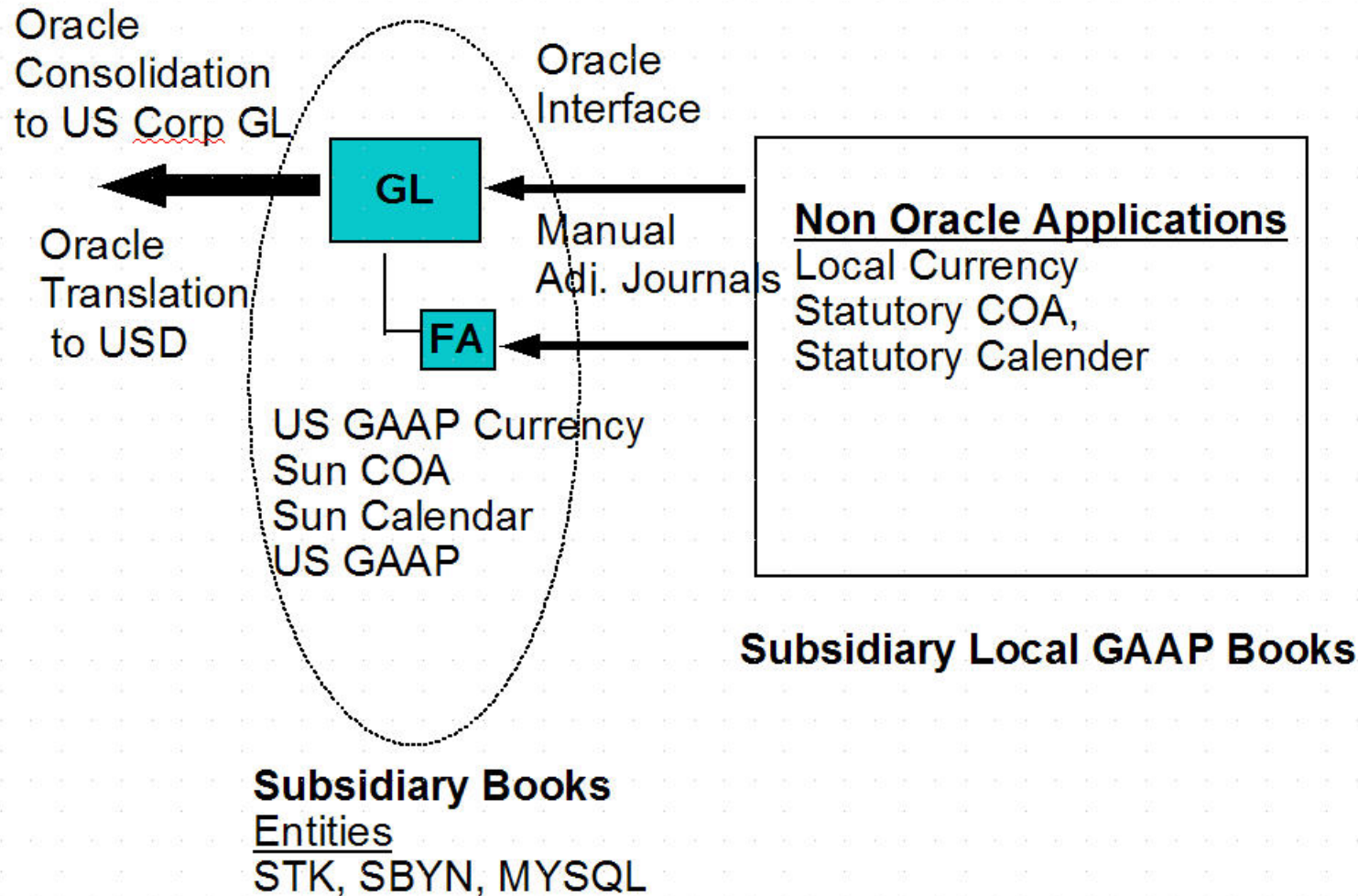
MGCM3 (G3) - Subsidiary – Buy/Sell, USD Currency / USD Currency
US Gaap / Local Gaap



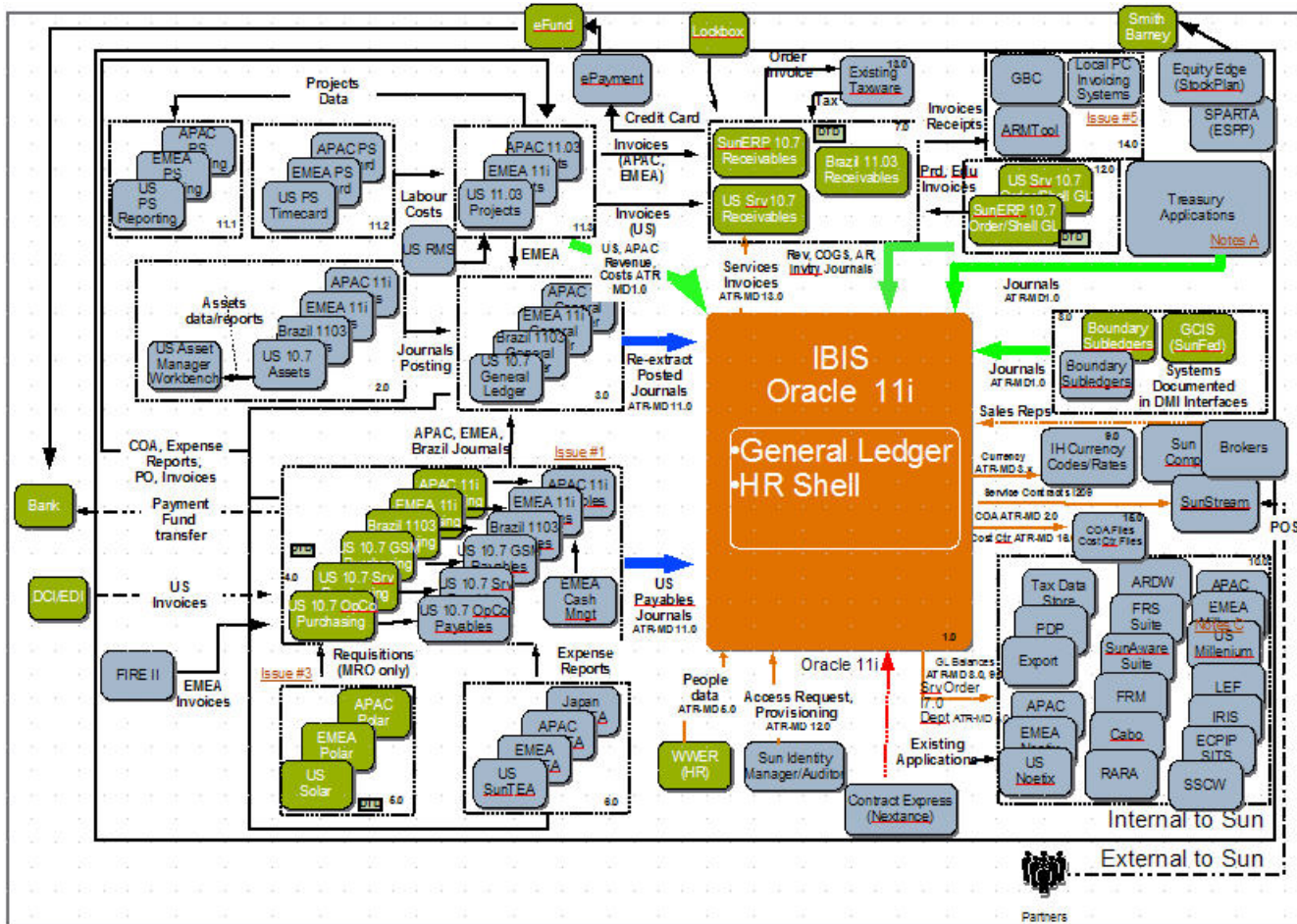
Primary/Subsidiary Books Entities
Singapore, BV1, Hong Kong ...

Subsidiary Local GAAP Books (if required)

MGCM4 (G4) – Emerging Countries, Acquisition, Shell Entities



Design : GL Transition Model



← Boundary Unposted Journal

→ Legacy posted Journal

→ The extras

Design : GL Charts of Accounts

- Global corporate chart of accounts for corporate and subsidiary GL books
- Local GAAP charts of accounts for subsidiary local GAAP books
- Use Oracle consolidation from subsidiary GL books to subsidiary local GAAP books

Window Prompt	Value Set	Display
Company	SUN_GL_COMPANY	
Business Unit	SUN_GL_BUSINESS_UNI	
Department	SUN_GL_DEPARTMENT	
Account	SUN_GL_ACCOUNT	
SubDetail	SUN_GL_SUBDETAIL	
Intercompany	SUN_GL_INTERCOMPAN	
Management Company	SUN_GL_MANAGEMENT_	
Product	SUN_GL_PRODUCT	
Project	SUN_GL_PROJECT	
Market Channel	SUN_GL_MARKET_CHAN	

Title	Description
Accounting Flexfield	
CORPORATE ACCOUNT FLEX	SUN CORPORATE ACCOUNT
SUN_BELGIUM_ACCOUNTING	Sun Belgium Local Accounting
SUN_CHINA_ACCOUNTING_F	DON'T USE
SUN_CN_ACCOUNTING	China Local Accounting Flexfi
SUN_COLOMBIA_ACCOUNTIN	Colombia Local Accounting Fl
SUN_FRENCH_ACCOUNTING	Sun France Local Accounting
SUN_HUNGARY_ACCOUNTIN	Sun Hungary Local Accountin

Window Prompt	Value Set	Display
Company	SUN_GL_COMPANY	
Business Unit	SUN_GL_BUSINESS_UNI	
Department	SUN_GL_DEPARTMENT	
Account	SUN_GL_CO_ACCT	

Design : Functional Currency

- GAAP, operations, economic factors and exchange rates drive functional currency determination
- Corporate GAAP functional currency for a subsidiary may be different from local GAAP functional currency
- Oracle MRC meets both needs
- Oracle currency Translation and Revaluation are used for consolidation, reporting and re-measurement

IN_USGAAP_INR		Primary Set of Books		IN_USGAAP_INR
628 SUN MICROSYSTEMS INDIA PRIVAT		Currency		INR
CORPORATE ACCOUNT FLEXFIELD		Chart of Accounts		CORPORATE ACCOUNT
SUN_FISCAL_CAL		Calendar		SUN_FISCAL_CAL
Futu		Reporting Set of Books		IN_MRC_USD
Period		Functional Currency		USD
Journalling		Set of Books Type		
Average Balances		<input checked="" type="radio"/> Primary Set of Books <input type="radio"/> Reporting Set of Books <input type="radio"/> Not Applicable		

Design : Calendars

- Corporate calendar for corporate and subsidiary GAAP books
- Local calendar for subsidiary local GAAP books where needed
- Oracle consolidation allows mapping even with different calendars

SUN_FISCAL_CAL

Sun Fiscal Calendar (July through June)

Quarter					
Year	Num	From	To	Name	
2008	1	01-JUL-2007	03-AUG-2007	01-08	
2008	1	04-AUG-2007	31-AUG-2007	02-08	
2008	1	01-SEP-2007	30-SEP-2007	03-08	
2008	2	01-OCT-2007	02-NOV-2007	04-08	
2008	2	03-NOV-2007	30-NOV-2007	05-08	
2008	2	01-DEC-2007	30-DEC-2007	06-08	

SUN_IN_FISCAL

India Local Book Fiscal Calendar with an Adjustment Period

Quarter					
Year	Num	From	To	Name	
2008	1	02-APR-2007	04-MAY-2007	01-08	
2008	1	05-MAY-2007	01-JUN-2007	02-08	
2008	1	02-JUN-2007	30-JUN-2007	03-08	

SUN_LA_FISCAL

Latin America Local Book Fiscal Calendar with an Adjustr

Quarter					
Year	Num	From	To	Name	
2007	1	01-JAN-2007	31-JAN-2007	01-07	
2007	1	01-FEB-2007	28-FEB-2007	02-07	
2007	1	01-MAR-2007	31-MAR-2007	03-07	

Design : GL Data Conversion

- Converted 12 months (last fiscal year) of GL balances from legacy corporate, subsidiary and local GAAP GL books
- Each entered currency were converted individually
- Translated currency were recreated after data conversion
- Converted detail journals for subsidiary local GAAP books for current local GAAP fiscal year
- Data was brought from legacy systems to new 11i books via GL_INTERFACE table

Design : Access Request and Segregation of Duties

- Access requests are submitted via Sun identity management online form
- Segregation of duties (SOD) violation are checked against pre-defined responsibilities structure and rule sets
- Direct manager and gatekeeper to approve request
- Periodic SOD checks are performed

Required Oracle Access

Oracle Version 11.5.10-IBIS

Job Role FINANCE - FIELD FINANCE - REVENUE MGMT

Geography APAC*

Country AUSTRALIA*

	Responsibility name	Oracle Application
<input type="checkbox"/>	AU AR INQUIRY	RECEIVABLES
<input type="checkbox"/>	AU PRICING INQUIRY	ADVANCED PRICING
<input type="checkbox"/>	AU RPL AR INQUIRY	RECEIVABLES
<input type="checkbox"/>	AU RPL DISCOVERER RECEIVABLES INTELLIGENCE	REPORT MANAGER
<input type="checkbox"/>	AU RPL PRICING INQUIRY	ADVANCED PRICING
<input type="checkbox"/>	AU SERVICE CONTRACTS INQUIRY	SERVICE CONTRACTS

Responsibilities

Find % GL %

Responsibility	Application
AU GL GIS SCHEDULE JOBS	System Administration
AU GL GIS SETUP	General Ledger
AU GL INQUIRY	General Ledger
AU GL JOURNAL	General Ledger
AU GL LOCAL ACCOUNTING	General Ledger
AU GL SCHEDULE JOBS	System Administration
AU GL SETUP	General Ledger
AU GL SETUP INQUIRY	General Ledger

End OK Cancel

Design : The Controls

- **Security Rules**
 - Impose on COA segment values
 - Prevent manual journals from posting to control accounts, Intercompany etc.
- **Cross Validation Rules**
 - Keep accounts clean
- **FSG reports**
 - Centrally created and maintained
 - Control total on each report
 - 250+ reports
 - Generic row sets and column sets for ad hoc reports

Independent Segment	Account	Dependent Segment	
Independent Value		Value Description	

Security Rules		
Name	Description	Message
FA BS Acct	Restricted access to FA BS accounts	FA BS Acct: You can not use
Interco Acct	Restricted access to Interco accounts	Interco Acct: You can not use
Spares Acct	Restricted access to Spares accounts	Spares Acct: You can not use

Security Rule Elements		
Type	From	To
Include	000	ZZZ
Exclude	205	206
Exclude	208	212
Exclude	214	215

Report	
A/A-MGT-P&L-12M-SUM	
A/A-MGT-P&L-PQY-DET-AI	
A/A-MGT-P&L-PQY-SUM-AI	
A/A-MGT-P&L_PQY_DET	
ACCOUNT 803,806 Recon	
AR-SR DEF REVENUE	
AR-SR RES BALANCE	
BU805 Report PTD 1	
BU805 Report PTD 2	
BU805 Report QTD 1	
BU805 Report QTD 2	
BU805 Report YTD 1	
BU805 Report YTD 2	
CONS-ICO 999	
CONS-INVENTORY BY ACCOUNT	
CONS-MPA-CHECK L05 & A05	
COS-GENERAL-DEPT SPEND-T	
DEPART EXP BY DEPART - BAS	
DEPARTMENTAL EXPENSES BY	
EMEA ACCOUNT 805 CONTROL	
EMEA ACCOUNT 813 CONTROL	
EMEA COMMISSIONAIRE REVEN	
EMEA COMPARATIVE BALANCE	
EMEA CSF Analysis PTD	
IBIS INTERCOMPANY AR/AP REPORT	
LA-ES-LOGISTICS-P&LQTD	
LEF RECON REPORT YTD	
LEF-RECON FOR LCO'S	
LS EMEA DETAIL	
LS EMEA TOTAL	
OPEX - EMEA BY COUNTRY 1	
OPEX - EMEA BY COUNTRY 2	
OPEX - EMEA BY COUNTRY 3	
OPEX - NON SALES COUNTRIES	
OPEX-PTD-EMEA BY REGION	
OPEX-PTD-NE BY COUNTRY-1	

Design : The Journal Entry

- **Journal approval**
 - Approval required for manual journals according to threshold amount
 - Hierarchical approvers by authorization limits
- **GIS (Intercompany) approval**
 - Both sender and receiver approval required
- **Developed flexi-extension to import journal from boundary systems**
- **AutoPost**
 - Scheduled to run every 30 mins for subledger journals posting

Type	XXSUN_GL_JOUR_CONTROL_FILE		
Meaning	Control File names		
Application	XXSun Custom Application		
Description	Control File names for GL Unposted Journals		

Code	Meaning	Description	Tag
ACCESSGL	ACCESSGL	accessline.ctl	90001:10
ACCTACALL	ACCTACALL	acctacall.ctl	
AMEXPCARD	AMEXPCARD	amex.ctl	90002:10
AREXTRACT	AREXTRACT_11IGL	erp_glext.ctl	90003
AUDIOGL	AUDIOGL	audio.ctl	90004:10
AUTOGL	AUTOGL	autoattend.ctl	90005:10

Code	Meaning	Description
XXSUN_GL_JOUR_BALANCING_CC	Balancing line combination	XXSun Custom Application
	Balancing line combinations for Unpos	

Code	Meaning	Description
ACCESSGL	ACCESSGL	110-110-0001-173-0955
AMEXPCARD	AMEXPCARD	110-110-0001-173-0987
AREXTRACT	AREXTRACT_11IGL	
AUDIOGL	AUDIOGL	110-110-0001-173-0908
AUTOGL	AUTOGL	110-110-0001-173-0954

Design : The Extras

- **Languages**

- 13 full language packs (reports, forms and TL tables)
- 7 partial language packs (TL tables)
- Database is UTF8 which allows data input of all languages

- **Workflow Inquiry**

- Available in GL inquiry responsibilities

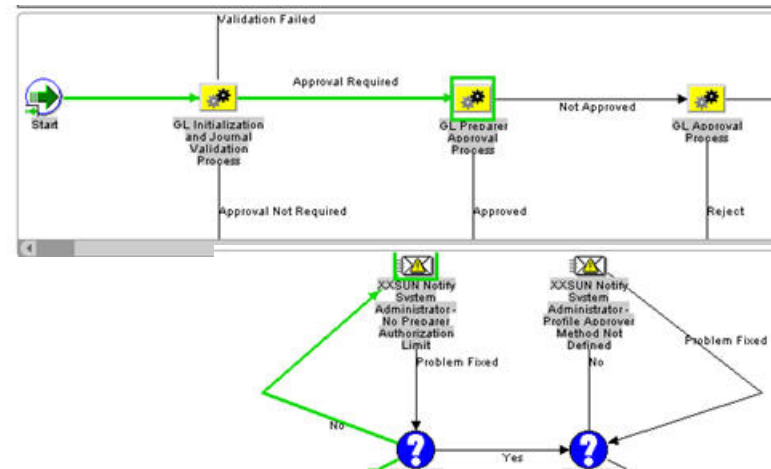
通貨: JPY
残高タイプ: 実績
Company: 645 Japan

会計フレックスフィールド 摘要

ソース カテゴリ 名称 摘要

645-431-0001-116-9984-999-645-9999-99999999-99
02-08
02-08

Select	Status	Activity	Parent Activity
<input type="radio"/>	<input checked="" type="checkbox"/>	Notified XXSUN Notify System Administrator - No Preparer Authorization Limit	GL Preparer Approval Process
<input type="radio"/>	<input checked="" type="checkbox"/>	Complete XXSUN Is Preparer Authorization Limit Set	GL Preparer Approval Process
<input type="radio"/>	<input checked="" type="checkbox"/>	Complete XXSUN Is Operational Hierarchy Defined?	GL Preparer Approval Process
<input type="radio"/>	<input checked="" type="checkbox"/>	Complete Start	GL Preparer Approval Process
<input type="radio"/>	<input checked="" type="checkbox"/>	Active GL Preparer Approval Process	GL Journal Approval Process



Design : The Extras ... /cont

- **Exchange Rates**

- Developed extension to populate daily cross rates and period end rate for 80+ currencies

From	To	Date	Type	AED To BRL
AED	BRL	31-JUL-2007	Spot	.5231632111
AED	BWP	31-JUL-2007	Spot	.0438896225
AED	CAD	31-JUL-2007	Spot	.2890883102
AED	CHF	31-JUL-2007	Spot	.3346175313
AED	CLP	31-JUL-2007	Spot	143.6223956873
AED	CNY	31-JUL-2007	Spot	2.0740841581
AED	COP	31-JUL-2007	Spot	536.1504009148
AED	CVE	31-JUL-2007	Spot	22.292742693

- **Month End Restricted Access**

- Developed an extension to lockout users from selected responsibilities during month end close

The screenshot shows the Oracle EBS interface for a job named 'XXSUN: GL Period Close User Lockout'. The job is set to run 'As Soon' and is currently in a 'Completion...' state. A dropdown menu for 'Period Close Geo' is open, showing a list of geo inclusions with columns for Meaning, Description, and Tag.

Meaning	Description	Tag
Sun Germany	OU	EMEA
Sun United Kingdom	OU	EMEA
IN_USGAAP_INR	GL	ASIA_SC
US_USGAAP_USD	GL	US
IN_MRC_USD	GL_MRC	ASIA_SC
AR_MRC_USD	GL_MRC	US
IO_IN_USGAAP_INR	IO	ASIA_SC
SELECT ALL OTHER		ALL_PEF
88-Sun New Zealand	OU	NZ_DUM
AU_USGAAP_AUD	GL	ASIA_SC
SELECT ALL OTHER		ALL_PEF
%GL%	General Ledger	GL
%AR%	Receivables	AR
%PROJECTS%	Projects	PA

Design : Month End Close

- **Step 1 : Subledger Close** – Transfer journals to GL
- **Step 2** : Intercompany, cash, revenue, accrual, reserve posting
- **Step 3 : Consolidation**
 - Execute using Oracle consolidation workbench
 - Subsidiary GL books consolidate to corporate GL books
 - Subsidiary GL books consolidate to subsidiary local GAAP books

The screenshot displays the Oracle consolidation workbench interface. It includes a 'Mapping' window with a list of mappings, a 'Transfer Consolidation Data' window with various settings, and a 'Segment Rules' window with a table of rules.

Parent	Subsidiary	Action
US_USGAAP_USD	AT_USGAAP_EUR	Intercompany
		Management Company
		Product
		Project
		Market Channel

Design : Month End Close .../cont

- **Step 4 : Elimination**
 - 600+ elimination sets for interco profit, AP/AR
- **Step 5 : Reconciliation using FSG reports**
 - Shows intercompany balances and retain earnings across all books

The screenshot shows the Oracle Consolidation Workbench interface. The main window is titled 'Consolidation Workbench (US_USGAAP_USD)' and has tabs for 'Preparation/Transfer' and 'Elimination'. The 'Elimination' tab is active, showing a list of elimination sets. The 'Parent' is 'US_USGAAP_USD' and the 'Parent Period' is '06-08'. The 'Overall Status' is 'Not Generated'. A table lists several elimination sets, including 'CONB3 JAPAN ACC760 INT CONSUMPT ELIM'. A pop-up window shows details for one of these sets, including its description, elimination company (921), and effective dates. A right-hand pane contains buttons for 'Mapping', 'Mapping Set', 'Translation Status', 'Transfer', 'Transfer Set', 'Elimination Set', and 'Eliminate'.

Shared Services

- **Global Accounting Team**
 - Ownership of the General Ledger for each subsidiary
 - Accounting for Intercompany, Treasury, Tax and consolidation to corp
- **Finance Consolidation Team**
 - Perform consolidation and elimination monthly process
 - Prepare corp financial statements and external reports (10Q, 10K...)
- **Finance Application Management Team**
 - Maintenance of seed data in GL (COA values, cross validation rules, security rules...)
 - Support all boundary systems interface to GL
 - Gatekeeper for open/close GL periods
- **IT Support Team**
 - Resolve system issues

The Big Five's

Top Five Guiding Principles

- Challenge old assumptions
- Bias towards vanilla 11i
- One problem, one answer
- Keep it simple
- Requirements not preferences

Top Five Things to Know

- Once setup, you can't change it
- You will discover new old things
- Spend time to try out everything
- Use automated tool for system setup
- Develop reconciliation tool for data conversion

Q & A

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