

What's New in Progress OpenEdge Management?

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Focus of the Talk

- Security Improvements
- Internal Improvements
- Data Admin Console
- Usability Improvements
- OE WebServer Support
- Debugging/Developer Improvements
- Q&A

Security Improvements: Newer Improved Security Mechanism with Shiro

JaaS was used to provide 'basic' authentication in OEM

Limitations:

- Need to restart AdminServer after making any permission changes
- No ability to logout
- No timeout option
- Need to restart Jetty after making any changes for authorization
- Supports only few hashing algorithms – not strong enough
- Trending user allowed all privileges – possibility of backdoor entry into OEM

Security Improvements – Replacement with Shiro

Solution: Replaced with Shiro

Benefits

- More modern and flexible implementation
- Cleaner simpler Login page
- Less tightly coupled with Jetty
- Dual authentication configuration: form-based + HTTP-basic
- Ability to Timeout users
- User information can be encrypted with stronger salted hashes
- Possible backdoor entry corrected for 'Trending' user

Internal Improvements

Replace Sonic with ActiveMQ and Camel
Replace PSEPro with Orient DB

Internal Improvements – Replacement of PSEPro

OEM used two different instances of the PsePro database:

- 1. config db (for storing configuration settings), and**
- 2. graph cache database (for storing graph creation information)**

Limitations

- Divested by Progress - No longer free
- Limitation on number of objects
- No support

Internal Improvements – Replacement of PSEPro

Solution: Replaced with OrientDB

Benefits

- Free
- Designed to scale to billions of documents.
- Lightweight
- Easily embeddable
- Very popular; supported by a large group of contributors

Sonic Management Framework was used to communicate with remote instances of the AdminServer

Limitations

- OEM uses Sonic 6.1 – Unsupported since its too old
- Sonic was divested by Progress
- Overly complicated setup and maintenance
- Upgrading to newer version needed a rewrite
- OEM does not use standard RPC mechanisms
- Difficult to configure OEM and remote AdminServers for monitoring
- Fragile startup configuration

Internal Improvements – Replacement of Sonic Continued

Solution: Replaced with a combination

■ **Active MQ**

- Provides reliable/secure/authenticated connections
- Provides reliable messaging for async notifications

■ **Camel**

- Provides addressable services using camel routes
- Provides RPC to-from those services over JMS

■ **Spring**

- Provides hosting and is a dependency of Camel

■ **Shiro**

- Provides authentication support (OS-based or ini-realm based)

Internal Improvements – Replacement of Sonic Continued

Benefits

- Simpler mechanism for remote AdminServer configuration
- No need to run fmconfig commands
- Auto-discovery feature
- Stronger security mechanism to perform Remote AdminServer authentication (using Shiro)
- Reliable and secure transport mechanism
- ActiveMQ connections secured with SSL (in 11.4)
- Advisory message support
- Ability to perform automatic compression for larger messages

Downside

- 'not' backward compatible

Data Administration Console DAC

Table Partitioning Support
Multi-tenancy Support

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Data Administration Console (DAC)

- Introduced for Multi-tenancy support in 11.0
- Extended for Table Partitioning in 11.4

OpenEdge Management console interface showing the Database Administration section. The interface includes a sidebar with navigation links like 'My Dashboard', 'My Collections', and 'Shared Collections'. The main area displays 'Resources with alerts' as a table, followed by two performance graphs: 'CPU: CPU (general)' and 'Memory: Memory used'. At the bottom, there is a 'Database Tasks' section with a table of tasks and their statuses.

Resource	First Alert	Last Alert	Total
nbbedhdaniels2.FathomTrendDatabase	Sep 19, 2014 6:06:42 PM	Sep 19, 2014 6:06:42 PM	2
nbbedhdaniels2.restmgr1	Sep 19, 2014 12:55:26 PM	Sep 19, 2014 12:55:26 PM	1
nbbedhdaniels2.SMTP_MAIL	Sep 19, 2014 12:55:22 PM	Sep 19, 2014 10:31:09 PM	1

Task Name	Start Time	Status
sports2000su.Acme - creating tenant	2014-09-19T01:4...	✓
sports2000.tnt04 - creating tenant	2014-09-18T18:5...	✓
sports2000 - dump table data	2014-09-17T20:3...	✓
tdemo - dump table data	2014-09-18T08:3...	✓

Database Administration menu options:

- New
 - Tenant
 - Tenant Template
 - Group
 - Partition Policy
 - Database Connection
- Dump data and definitions
- Load data and definitions
- Database Connections
- Enable Multi-tenancy for Tables
- Tenant Templates
- Open New Database Administration Tab

Task Viewlet

Data Administration Console (DAC)

The image displays two screenshots of the Progress OpenEdge Management console, illustrating the navigation path from the Database Administration page to the Database Connection Details page.

Left Screenshot (Database Administration):

- The breadcrumb navigation path is highlighted with an orange circle and labeled "Breadcrumb".
- The "Database Administration" tab is selected in the top navigation bar.
- The "Connections" section on the left lists several databases: icfdb, sports2000, sports2000su, and tpdemo.
- A red callout box labeled "New" points to the "New" button in the "Connections" section.

Right Screenshot (Database Connection Details - sports2000su):

- The breadcrumb navigation path is highlighted with an orange circle and labeled "Breadcrumb".
- The "Database Connection Details - sports2000su" tab is selected in the top navigation bar.
- The "Manage Database Connection" section displays configuration details for the selected database.
- The "Database Features" section shows a table of features and their status.
- The "Security Summary" section provides an overview of security settings.
- The "Data Administration" and "Storage Management" sections are visible at the bottom.

Database Features Table:

Feature Name	Status	Action
Table Partitioning	✓	
Multi-tenancy	✓	
Large Keys	✓	
64 Bit Sequences	✓	
64 Bit DBKEYS	✓	

Security Summary Table:

Item	Status	Action
Blank user id access	Allowed	Edit security options
Security administrator	Not defined	Edit security administrator
Users	1003	Edit users
Domains	12	Edit domains
Disabled domains	1	
Tenants	93	Create tenant
Super-tenants	18	
Named regular tenants	74	

ABL API for Multi-tenant and Table Partition Management (ABL API)

- Standalone ABL package
- Packaged in OpenEdge.DataAdmin
- Shipped in dataadmin.pl – always in propath
- Detailed information can be found in the OpenEdge manual
 - *OpenEdge Development: Programming Interfaces*
 - Chapter 4: **ABL API for Multi-tenant and Table Partition Management**

Data Administration Console (DAC)

Supports

- Security Administration
- Multi-tenancy
- General Data Administration
 - Dump and load data
 - Tenant and group selection
 - Load data definitions
 - Preview for multi-tenant
- Table Partitioning

Data Administration Console – Security Administration

The screenshot displays the OpenEdge Management console interface. The top navigation bar includes 'My Dashboard', 'Resources', 'Alerts', 'Library', 'Reports', 'Jobs', and 'Database Administration'. The main content area is titled 'Database Connection Details - sports2000su' and contains two panels: 'Manage Database Connection' and 'Database Features'. Below these is the 'Security Summary' section, which is highlighted with an orange rounded rectangle. This section provides a review of database security status and includes links to manage settings. At the bottom, there are sections for 'Data Administration' and 'Storage Management'.

Security Summary
Review database security status and manage security settings:

Blank user id access	Allowed	Edit security options
Security administrator	Not defined	Edit security administrator
Users	1003	Edit users
Domains	12	Edit domains
Disabled domains	1	
Tenants	93	Create tenant
Super-tenants	18	
Named regular tenants	74	

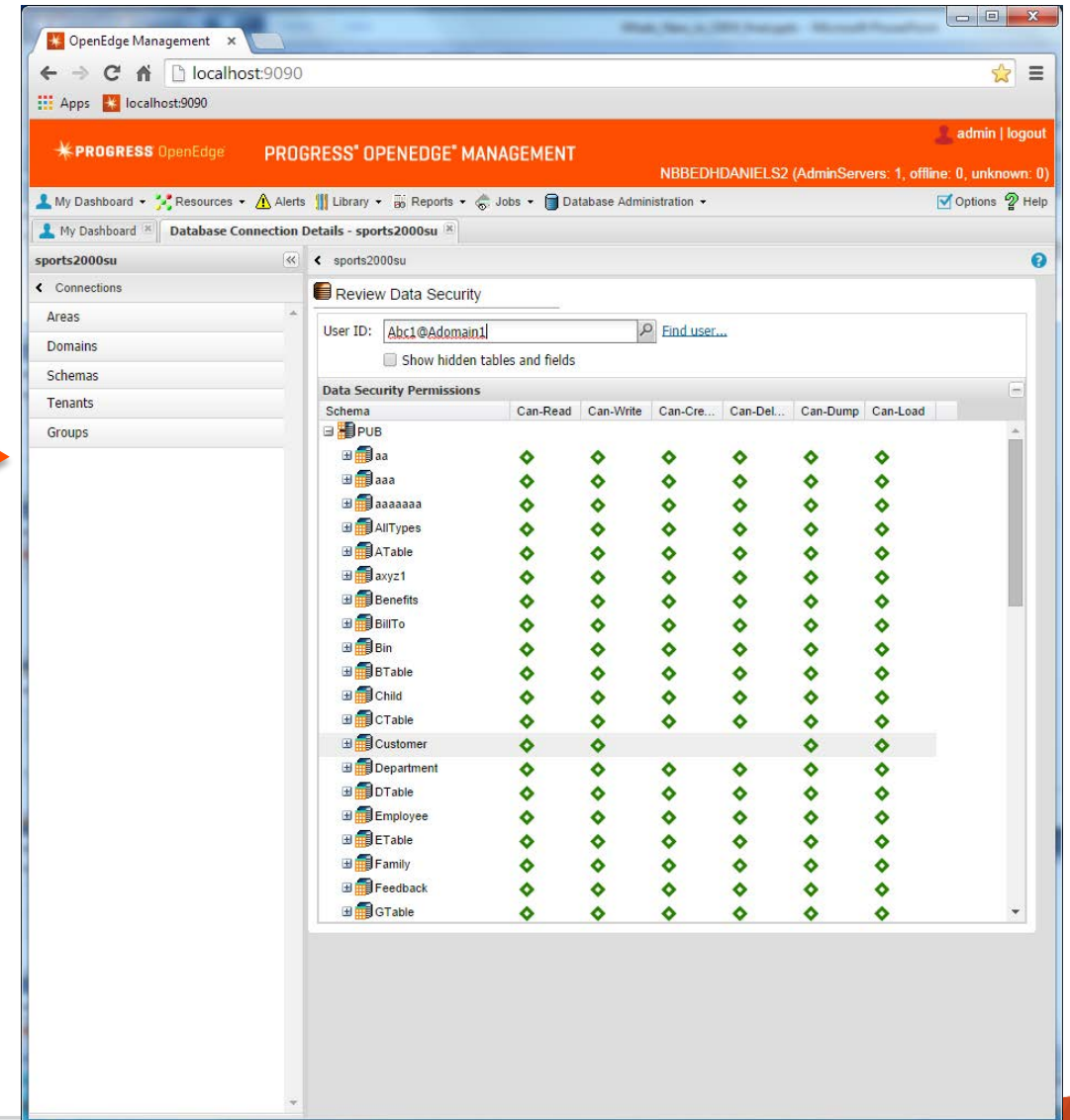
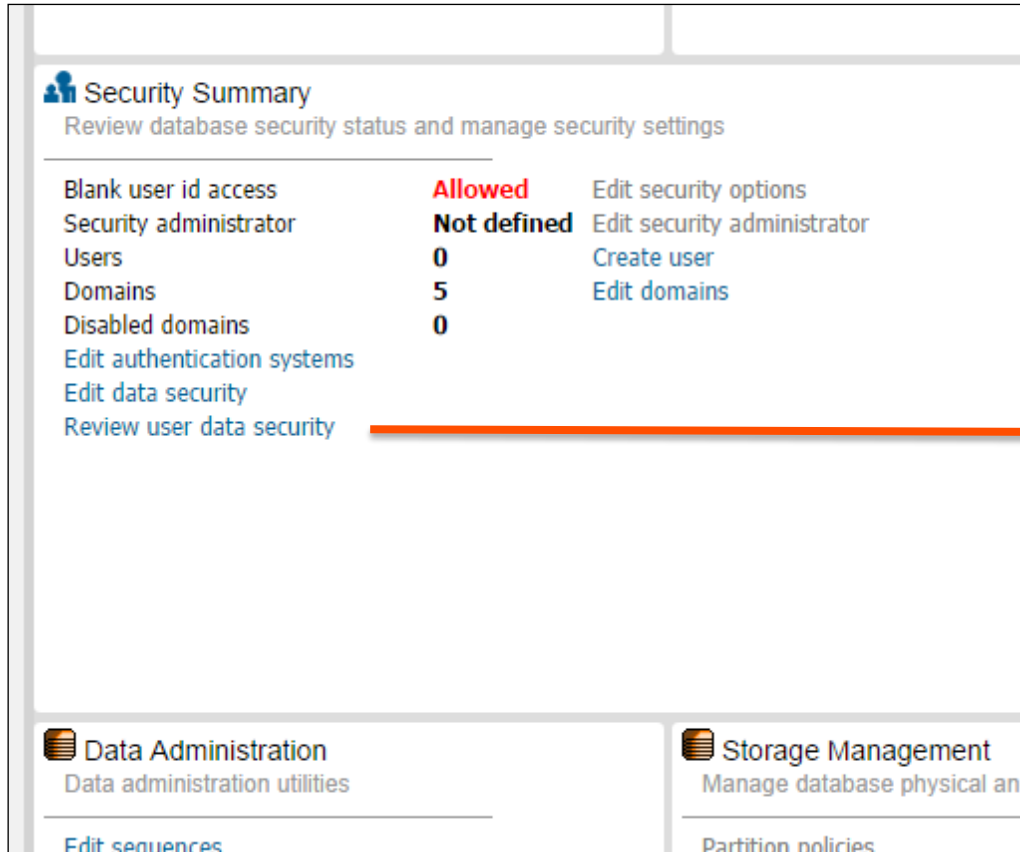
[Edit authentication systems](#)
[Edit data security](#)
[Review user data security](#)

Manage

- Authentication Systems
- Domains
- Users
- Table security settings
- Security options
- Administrator

Data Administration Console – Security Administration

Review User Data Security



Data Administration Console – Security Administration

Review User Data Security

The screenshot displays the 'Review Data Security' window in the Data Administration Console. The 'User ID' field is set to 'Abc1@Adomain1'. Below the search bar, there is a checkbox for 'Show hidden tables and fields'. The main section, titled 'Data Security Permissions', shows a list of schemas and tables with their respective permissions for the selected user. The 'Customer' table is highlighted.

Schema	Can-Read	Can-Write	Can-Cre...	Can-Del...	Can-Dump	Can-Load
aaaaaaa	✓	✓	✓	✓	✓	✓
AllTypes	✓	✓	✓	✓	✓	✓
ATable	✓	✓	✓	✓	✓	✓
xyz1	✓	✓	✓	✓	✓	✓
Benefits	✓	✓	✓	✓	✓	✓
DependentCare	✓	✓				
EmpNum	✓	✓				
HealthCare	✓	✓				
LifeInsurance	✓	✓				
MedicalSpending	✓	✓				
Pension401K	✓	✓				
StockPurchase	✓	✓				
BillTo	✓	✓	✓	✓	✓	✓
Bin	✓	✓	✓	✓	✓	✓
BTable	✓	✓	✓	✓	✓	✓
Child	✓	✓	✓	✓	✓	✓
CTable	✓	✓	✓	✓	✓	✓
Customer	✓	✓			✓	✓
Department	✓	✓	✓	✓	✓	✓
DTable	✓	✓	✓	✓	✓	✓
Employee	✓	✓	✓	✓	✓	✓

Shows user access to table and fields

- Find user popup
- Can test with non existing user

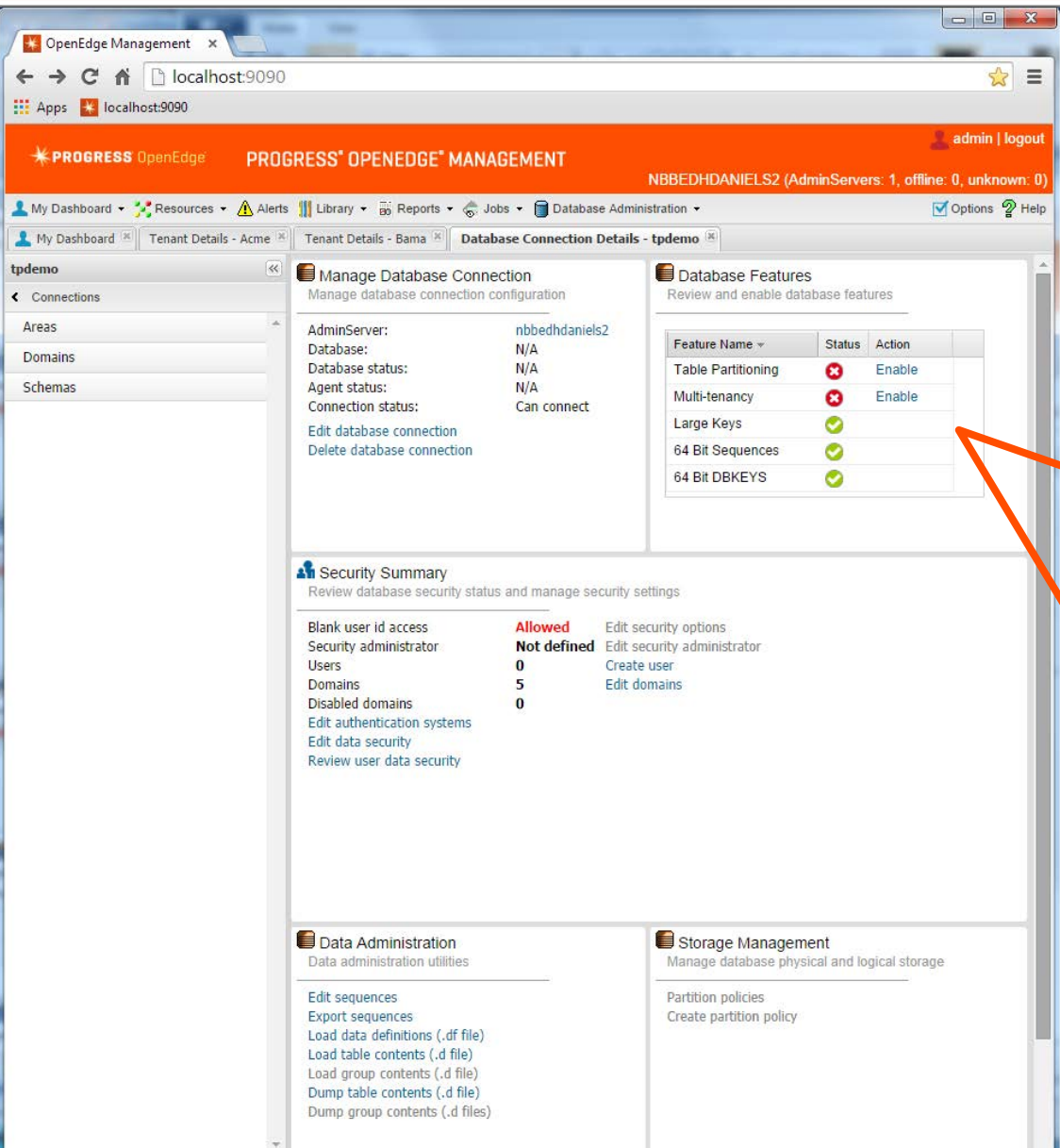
Data Administration Console – Multi-tenancy Support

Features

- Enable database for multi-tenancy
- Enable a table for multi-tenancy
- Manage tenants
- Manage groups
- Create tenant templates
- Data Administration
 - Edit sequence values
 - Load and preview data definitions
 - Dump and Load database contents per tenant or group

Data Administration Console – Multi-Tenant Support

Enable database for multi-tenancy



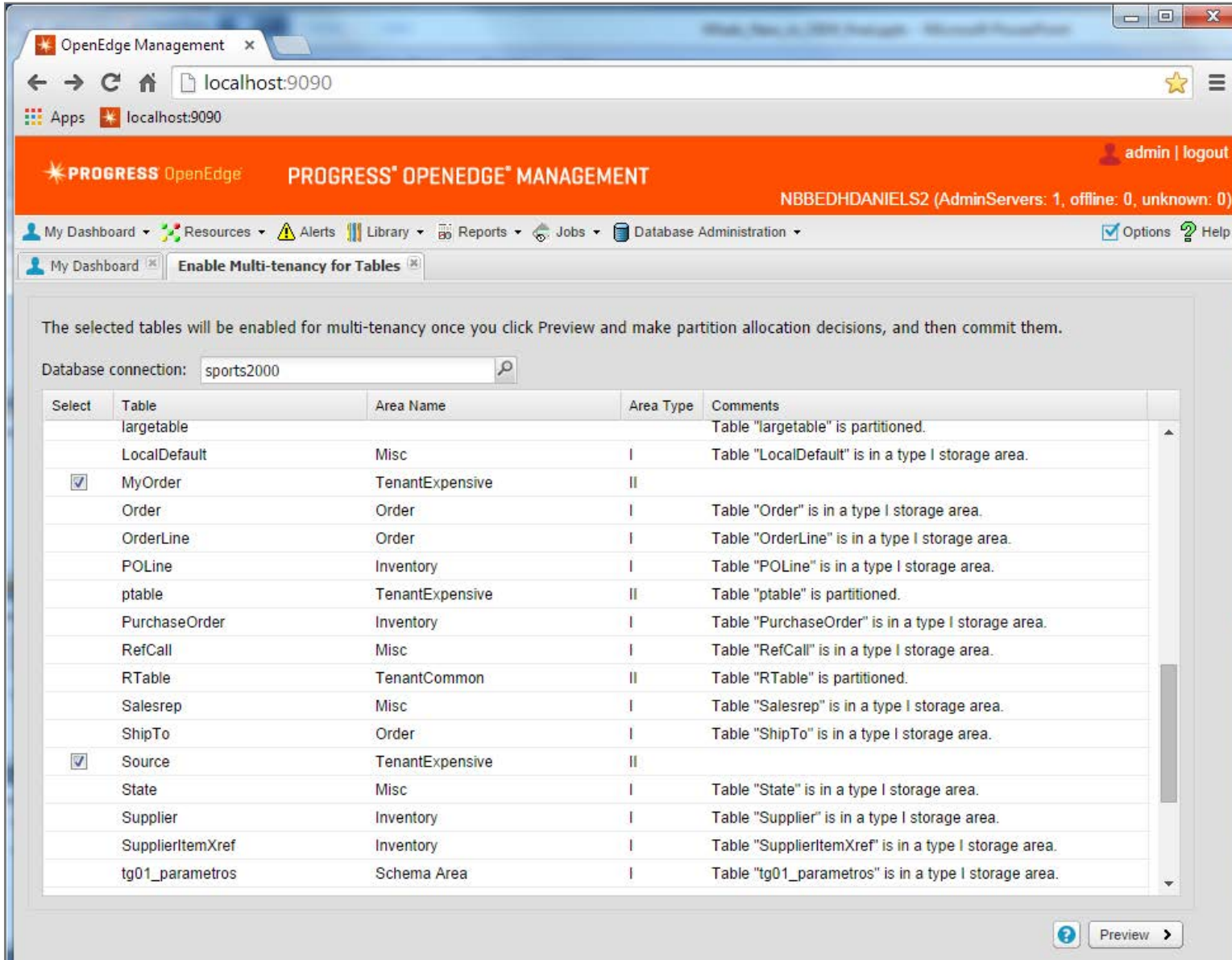
Database Features

Review and enable database features

Feature Name ▾	Status	Action
Table Partitioning	✖	Enable
Multi-tenancy	✖	Enable
Large Keys	✔	
64 Bit Sequences	✔	
64 Bit DBKEYS	✔	

Data Administration Console – Multi-Tenant Support

Enable multi-tenancy for tables



OpenEdge Management

localhost:9090

admin | logout

PROGRESS OPENEDGE MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Enable Multi-tenancy for Tables

The selected tables will be enabled for multi-tenancy once you click Preview and make partition allocation decisions, and then commit them.

Database connection: sports2000

Select	Table	Area Name	Area Type	Comments
	largetable			Table "largetable" is partitioned.
	LocalDefault	Misc	I	Table "LocalDefault" is in a type I storage area.
<input checked="" type="checkbox"/>	MyOrder	TenantExpensive	II	
	Order	Order	I	Table "Order" is in a type I storage area.
	OrderLine	Order	I	Table "OrderLine" is in a type I storage area.
	POLine	Inventory	I	Table "POLine" is in a type I storage area.
	ptable	TenantExpensive	II	Table "ptable" is partitioned.
	PurchaseOrder	Inventory	I	Table "PurchaseOrder" is in a type I storage area.
	RefCall	Misc	I	Table "RefCall" is in a type I storage area.
	RTable	TenantCommon	II	Table "RTable" is partitioned.
	Salesrep	Misc	I	Table "Salesrep" is in a type I storage area.
	ShipTo	Order	I	Table "ShipTo" is in a type I storage area.
<input checked="" type="checkbox"/>	Source	TenantExpensive	II	
	State	Misc	I	Table "State" is in a type I storage area.
	Supplier	Inventory	I	Table "Supplier" is in a type I storage area.
	SupplierItemXref	Inventory	I	Table "SupplierItemXref" is in a type I storage area.
	tg01_parametros	Schema Area	I	Table "tg01_parametros" is in a type I storage area.

Preview

Shows all tables

- Checkbox only if applicable for multi-tenancy
- Comments explains if tables cannot be made multi-tenant

Preview

- Allocate & Commit

Data Administration Console – Multi-Tenant Support – Tenants

The screenshot shows the 'Database Connection Details' page for the 'sports2000su' database. The page is divided into several sections:

- Manage Database Connection:** Displays connection details for 'nbbcdhaniel2'.
- Database Features:** A table showing the status of various database features.
- Security Summary:** A summary of security settings and user counts.
- Data Administration:** A section for managing data administration utilities.
- Storage Management:** A section for managing storage.

Feature Name	Status	Action
Table Partitioning	✓	
Multi-tenancy	✓	
64 Bit Sequences	✓	
64 Bit DBKEYS	✓	

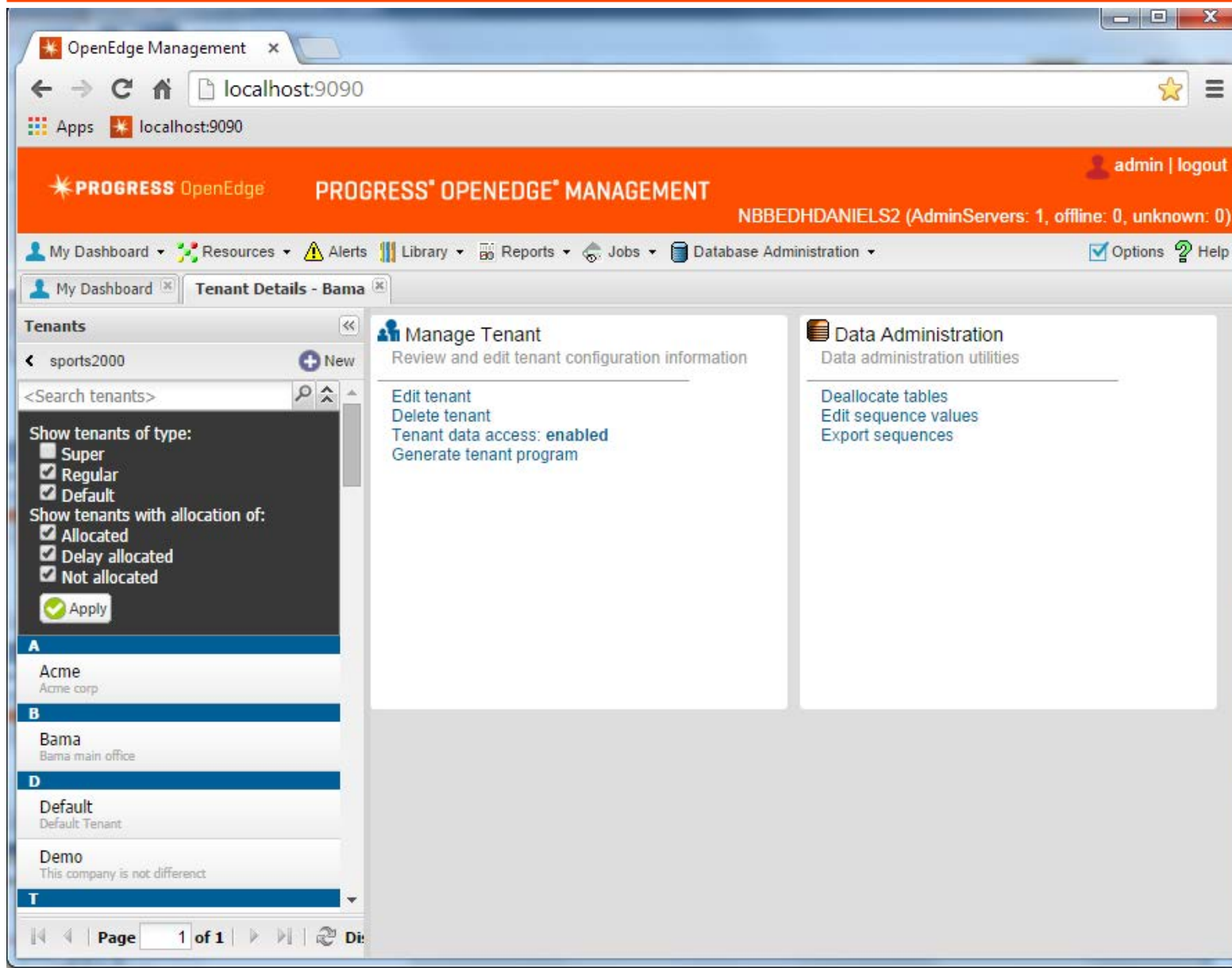
Blank user id access	Security administrator	Users	Domains	Disabled domains	Tenants	Super-tenants	Named regular tenants
Allowed	Not defined	1003	12	1	93	18	74

The screenshot shows the 'Tenant Details' page for the 'Acme' tenant. The page is divided into several sections:

- Tenants:** A list of tenants with a search bar and a 'New' button.
- Manage Tenant:** A section for managing tenant configuration information.
- Data Administration:** A section for managing data administration utilities.

Tenant Name	Tenant ID
Acme	Acme corp
Bama	Bama main office
Default	Default Tenant
Demo	This company is not different
t1	
t1200	
t201	
t202	
t203	
Tenant001	
Tenant002	
Tenant003	
Tenant004	
Tenant005	
Tenant006	
Tenant007	
Tenant008	
Tenant009	
Tenant010	
Tenant011	
Tenant012	
Tenant013	
Tenant014	
Tenant015	

Data Administration Console – Multi-Tenant Support – Tenants



New

- Create Tenant

Tenant list

- Filter & Pagebar

Manage Tenant

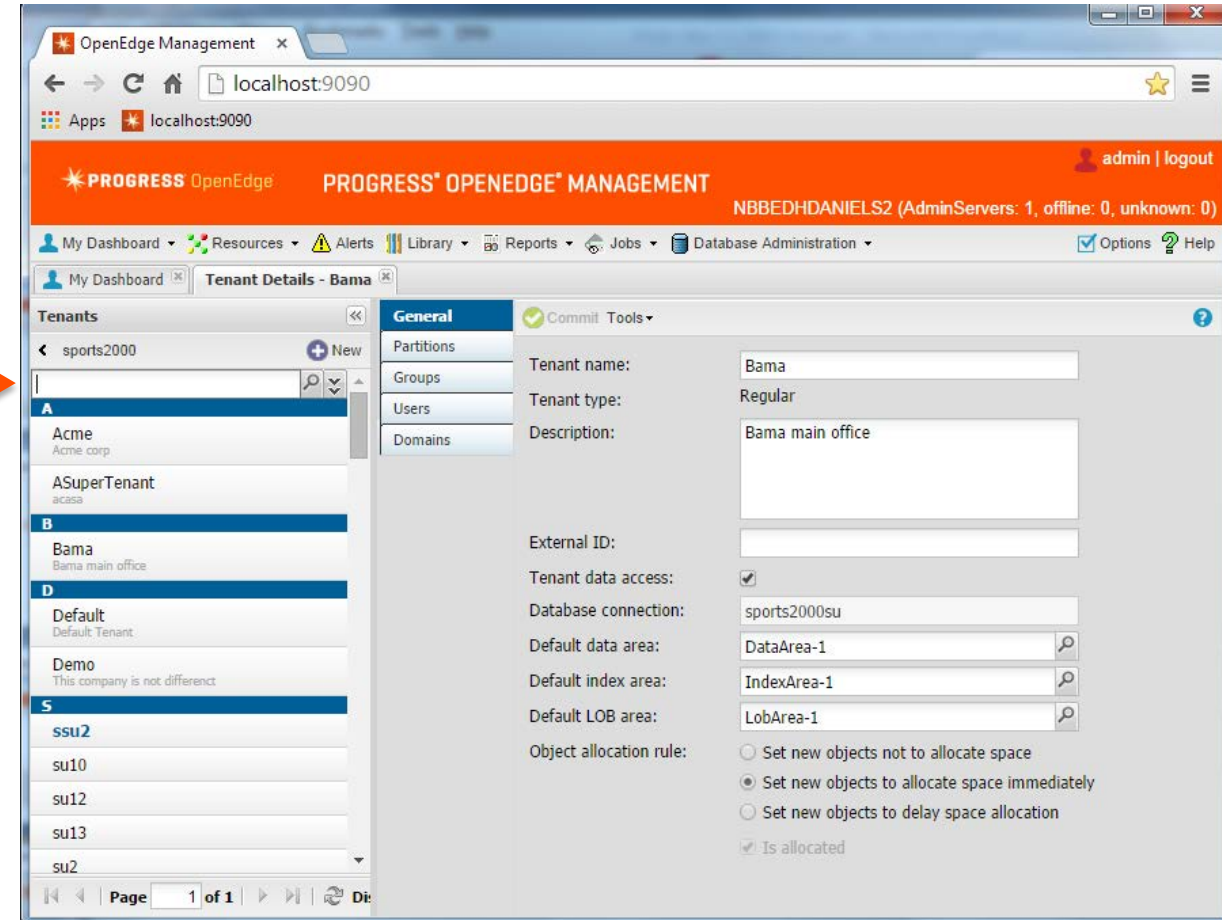
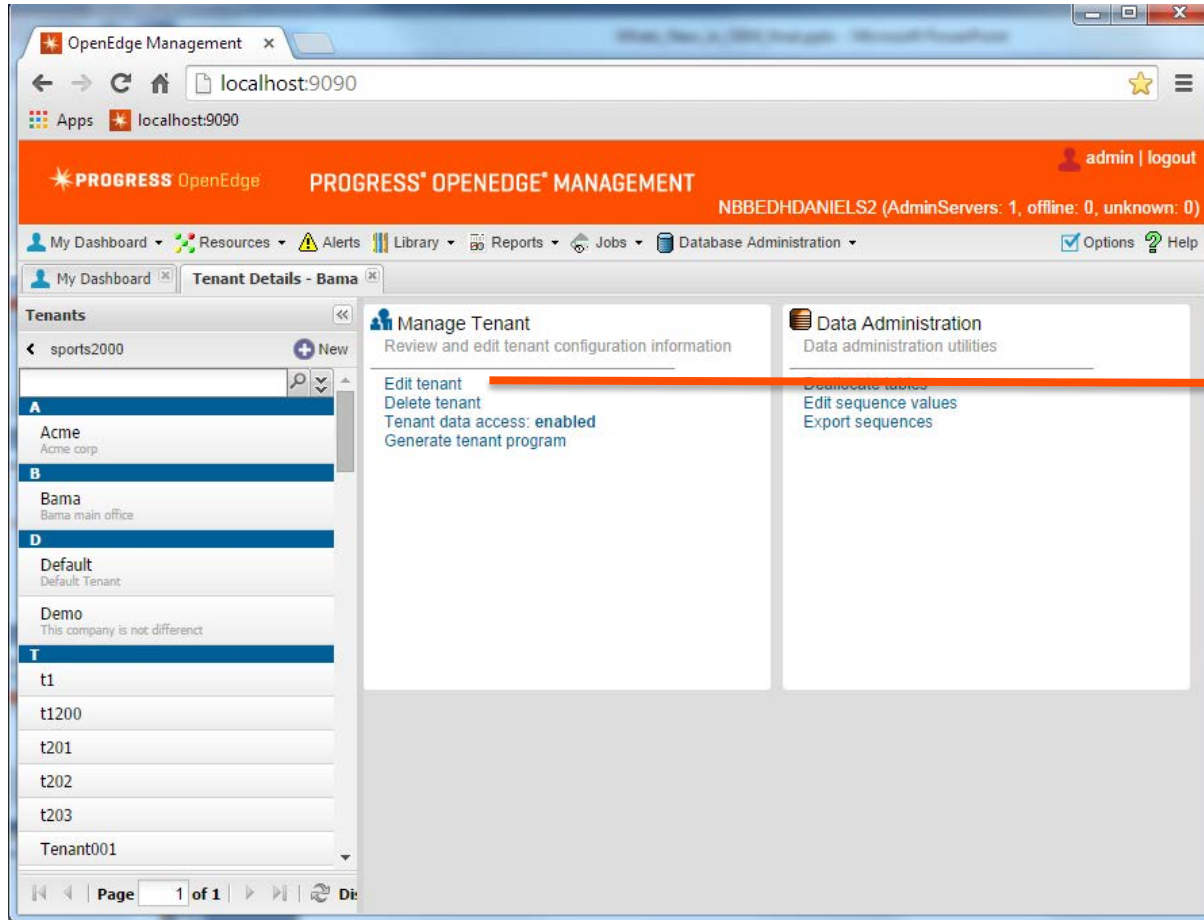
- Edit
- Delete
- Generate tenant program

Data Administration

- Deallocate tables
- Sequence values

Data Administration Console – Multi-Tenant Support

Edit Tenant



Data Administration Console – Multi-Tenant Support

Edit Tenant

The screenshot shows the OpenEdge Management console interface. The browser address bar displays 'localhost:9090'. The page header includes the 'PROGRESS OpenEdge' logo, the title 'PROGRESS OPENEDGE MANAGEMENT', and the user 'admin | logout'. A navigation bar contains links for 'My Dashboard', 'Resources', 'Alerts', 'Library', 'Reports', 'Jobs', and 'Database Administration'. The main content area is titled 'Tenant Details - Bama' and features a left sidebar with tabs for 'General', 'Partitions', 'Groups', 'Users', and 'Domains'. The 'General' tab is active, showing fields for 'Tenant name' (Bama), 'Tenant type' (Regular), 'Description' (Bama main office), 'External ID', 'Tenant data access' (checked), 'Database connection' (sports2000su), 'Default data area' (DataArea-1), 'Default index area' (IndexArea-1), 'Default LOB area' (LobArea-1), and 'Object allocation rule' (Set new objects to allocate space immediately). A 'Commit' button and a 'Tools' dropdown are also visible.

Edit

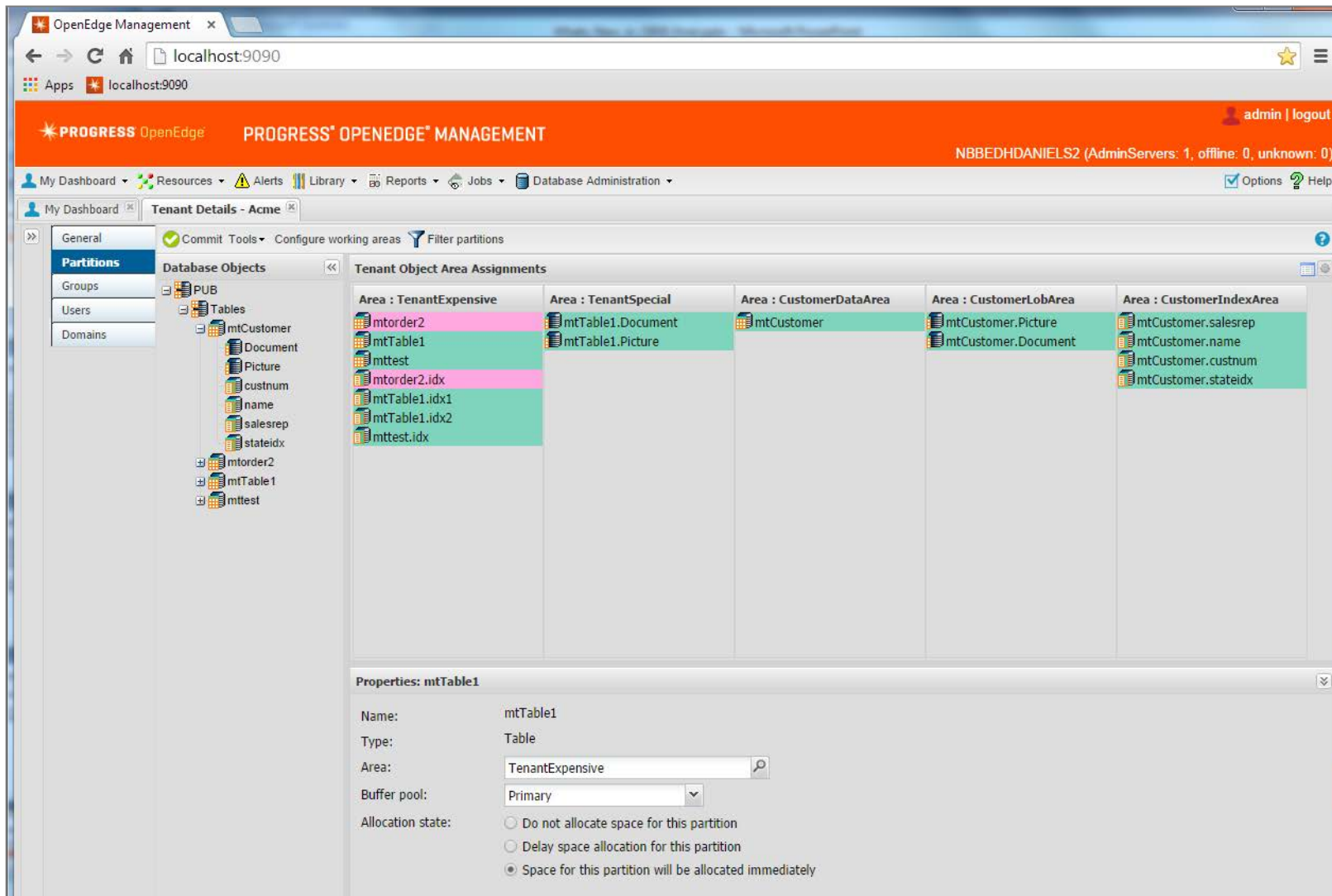
- Name, Description & Ext id
- Default allocation

Child lists

- Partitions
 - Allocation
- Groups
 - Add existing groups
- Users
- Domains

Data Administration Console – Multi-Tenant Support

Edit Tenant – Allocate

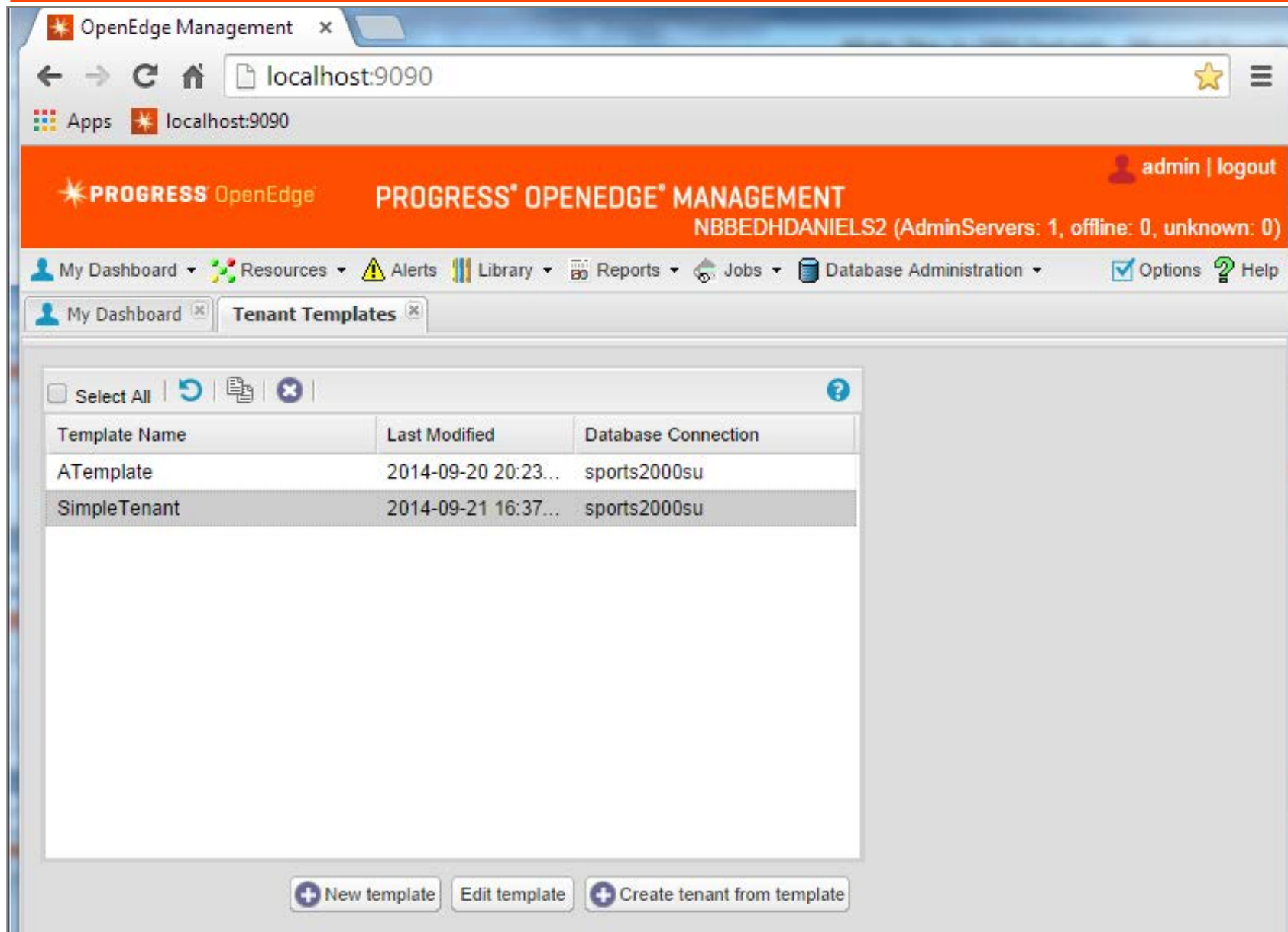


Partitions

- Define Area
 - Drag & Drop
- Allocation State
- Buffer Pool

Data Administration Console – Multi-Tenant Support

Tenant Templates



The screenshot shows the OpenEdge Management console interface. The browser address bar displays 'localhost:9090'. The page header includes the 'PROGRESS OpenEdge' logo, the title 'PROGRESS OPENEDGE MANAGEMENT', and the user 'admin | logout'. Below the header is a navigation bar with links to 'My Dashboard', 'Resources', 'Alerts', 'Library', 'Reports', 'Jobs', 'Database Administration', 'Options', and 'Help'. The main content area is titled 'Tenant Templates' and contains a table with the following data:

Template Name	Last Modified	Database Connection
ATemplate	2014-09-20 20:23...	sports2000su
SimpleTenant	2014-09-21 16:37...	sports2000su

Below the table, there are three buttons: '+ New template', 'Edit template', and '+ Create tenant from template'.

- New template
- Edit template
- Create tenant from template

Data Administration Console – Multi-Tenant Support – Groups

OpenEdge Management

localhost:9090

admin | logout

PROGRESS OpenEdge PROGRESS OPENEDGE MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su

sports2000su

Connections

Areas

Domains

Schemas

Tenants

Groups

Manage Database Connection

Manage database connection configuration

AdminServer: nbbedhdaniels2

Database: N/A

Database status: N/A

Agent status: N/A

Connection status: Can connect

Edit database connection

Delete database connection

Database Features

Review and enable database features

Feature Name	Status	Action
Table Partitioning	✓	
Multi-tenancy	✓	
Large Keys	✓	
64 Bit DBKEYS	✓	

Security Summary

Review database security status and manage security settings

Blank user id access **Allowed** Edit security options

Security administrator **Not defined** Edit security administrator

Users **1003** Edit users

Domains **12** Edit domains

Disabled domains **1**

Tenants **93** Create tenant

Super-tenants **18**

Named regular tenants **74**

Edit authentication systems

Edit data security

Review user data security

Data Administration

Data administration utilities

Edit sequences

Export sequences

Load data definitions (.df file)

Load table contents (.d file)

Load group contents (.d file)

Dump table contents (.d file)

Dump group contents (.d files)

Storage Management

Manage database physical and logical storage

Partition policies

Create partition policy

OpenEdge Management

localhost:9090

admin | logout

PROGRESS OpenEdge PROGRESS OPENEDGE MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Group Details - mtCustomerGroup1

Groups

Save Tools

Group name: mtCustomerGroup1

Description: Group x desc

Database connection: sports2000su

Table: mtCustomer

Default data area: TenantCommon

Default index area: TenantCommon

Default LOB area: TenantCommon

Object allocation rule:

☐ Set new objects to allocate space on group creation

☐ Set new objects to delay space allocation

☒ Do not allocate space for new objects

☐ Is allocated

mtCustomerGroup1

mtCustomerGroup2

mtOrderGroup1

mtOrderGroup2

Partitions

Tenants

PUB

mtCustomer

custnum

name

salesrep

stateidx

Document

Picture

Data Administration Console – Multi-Tenant Support – Groups

Edit Group – Partitions

OpenEdge Management

localhost:9090

admin | logout

PROGRESS OpenEdge PROGRESS OPENEDGE MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Group Details - mtCustomerGroup1

Save Tools

Group name: mtCustomerGroup1

Description: Group x desc

Database connection: sports2000su

Table: mtCustomer

Partitions Tenants

PUB

- mtCustomer
 - custnum
 - name
 - salesrep
 - stateidx
 - Document
 - Picture

Name: mtCustomer.salesrep

Type: Index

Area: TenantCommon

Buffer pool: Primary

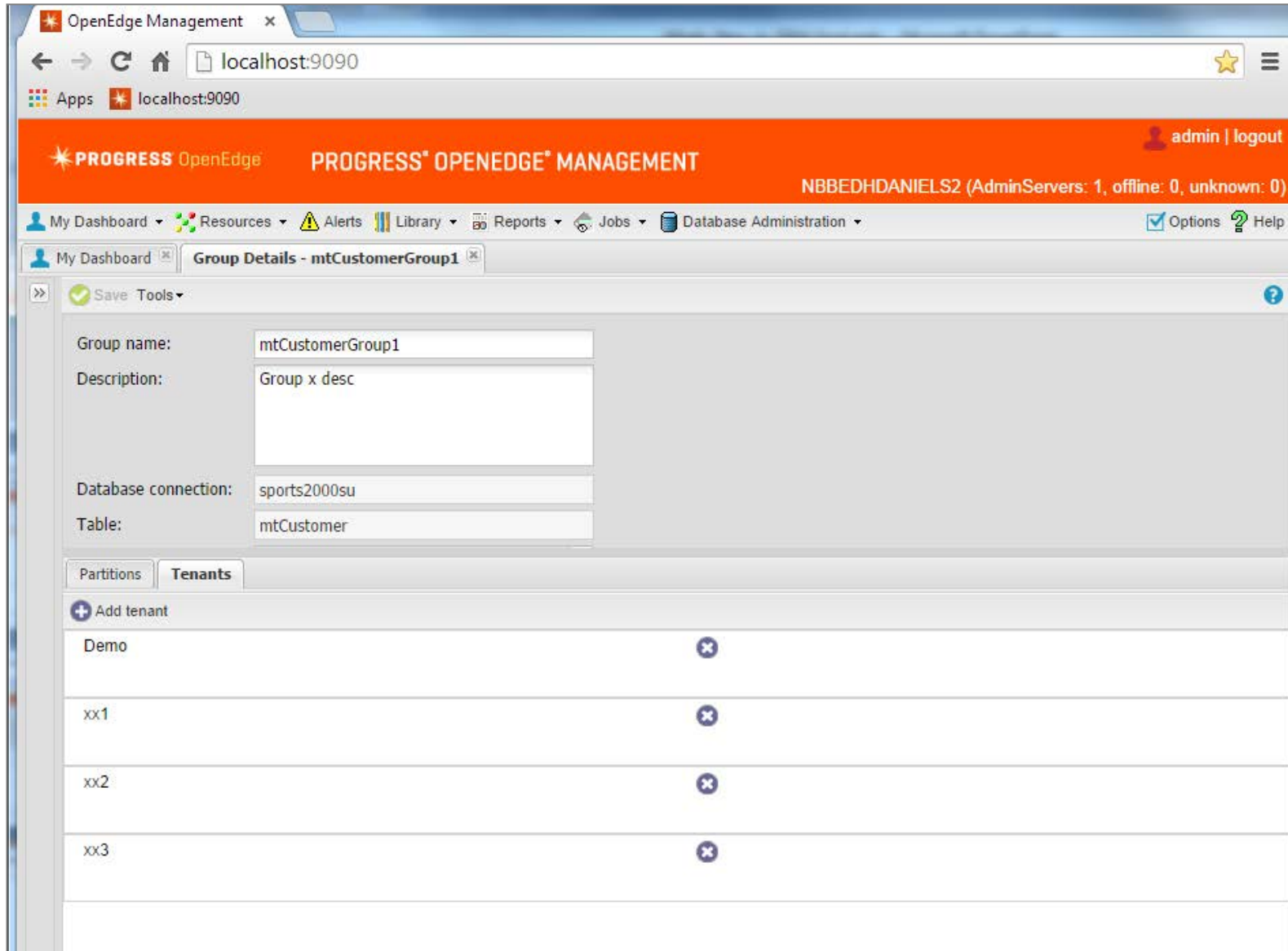
Table allocation state: Not allocated

Partitions

- Define Area
 - Drag & Drop
- Allocation State
- Buffer Pool

Data Administration Console – Multi-Tenant Support – Groups

Edit Group – Tenants



Tenants

- Add to group
- Remove from group

Data Administration Console – Data Administration

The screenshot displays the Progress OpenEdge Management console interface. The top navigation bar includes 'My Dashboard', 'Resources', 'Alerts', 'Library', 'Reports', 'Jobs', and 'Database Administration'. The main content area is titled 'Database Connection Details - sports2000su' and shows a table of system statistics:

Category	Count	Action
Users	1003	Edit users
Domains	13	Edit domains
Disabled domains	1	
Tenants	94	Create tenant
Super-tenants	18	
Named regular tenants	75	

Below the table, there are links for 'Edit authentication systems', 'Edit data security', and 'Review user data security'. On the left, a 'Connections' sidebar lists databases: 'icfdb', 'sports2000', 'sports2000su', and 'tpdemo'. At the bottom, the 'Data Administration' section is highlighted with an orange box, containing the following links:

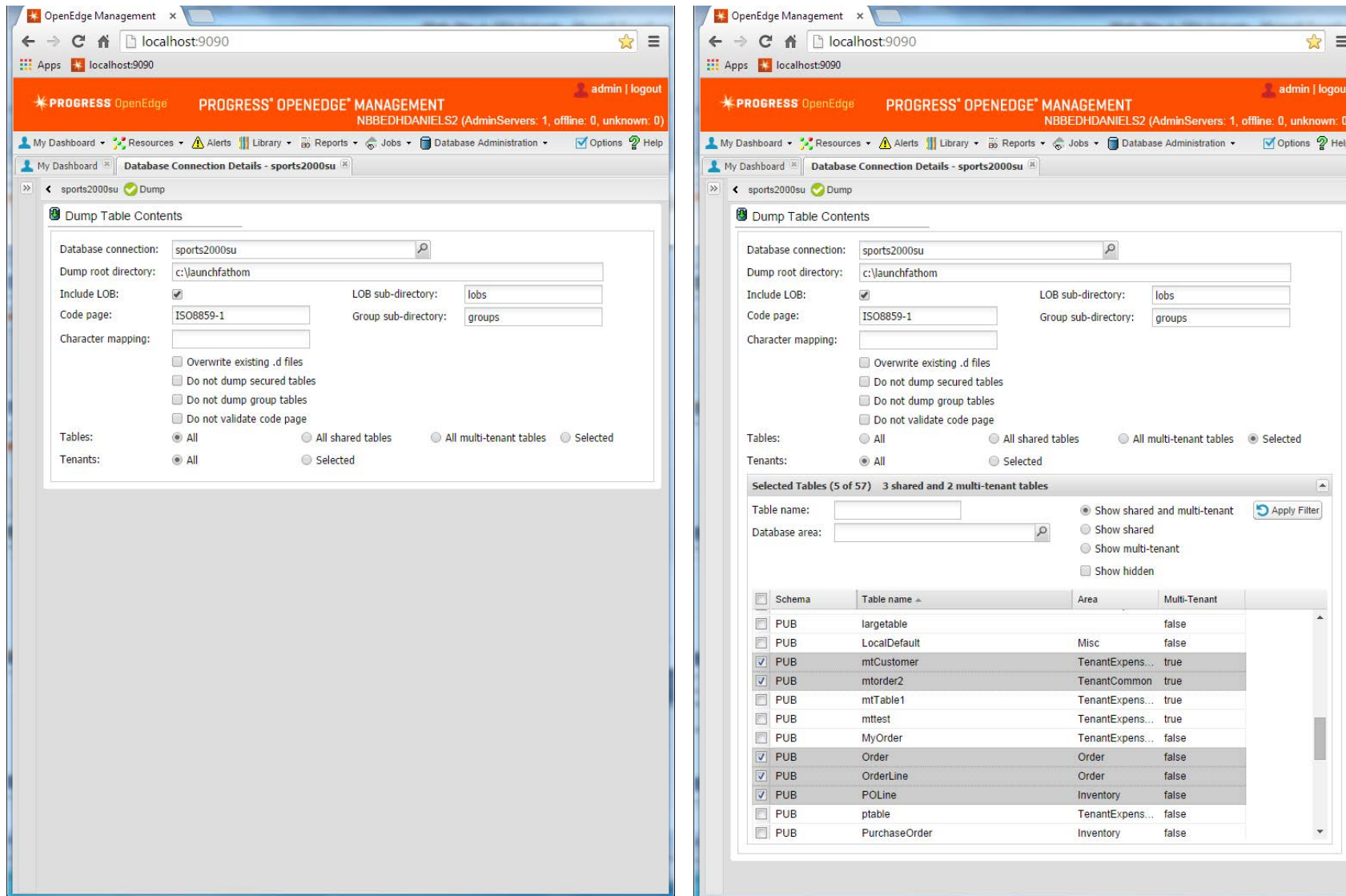
- Edit sequences
- Export sequences
- Load data definitions (.df file)
- Load table contents (.d file)
- Load group contents (.d file)
- Dump table contents (.d file)
- Dump group contents (.d files)

The 'Storage Management' section is also visible, with links for 'Partition policies' and 'Create partition policy'.

- Dump and Load of data
- Load of data definitions
- Sequences

Data Administration Console – Data Administration

Dump Data



Tables

- All
- Shared
- Multi-tenant
- Selected

Tenants

- All
- Selected

Data Administration Console – Data Administration

Dump Data & Monitor

My Dashboard

Database Administration

Tasks / sports2000su - dump table data

Sep 21, 2014 2:50:08 PM

Dump Table Data Summary

Task Name: sports2000su - dump table data

Database: [sports2000su](#)

Start Time: 2014-09-21 14:50:07 EDT

End Time: 2014-09-21 14:50:13 EDT

Progress:

Complete

Refresh

File System Status: nbbedhdaniels2

Name ^	Capacity	Free	Used
--------	----------	------	------

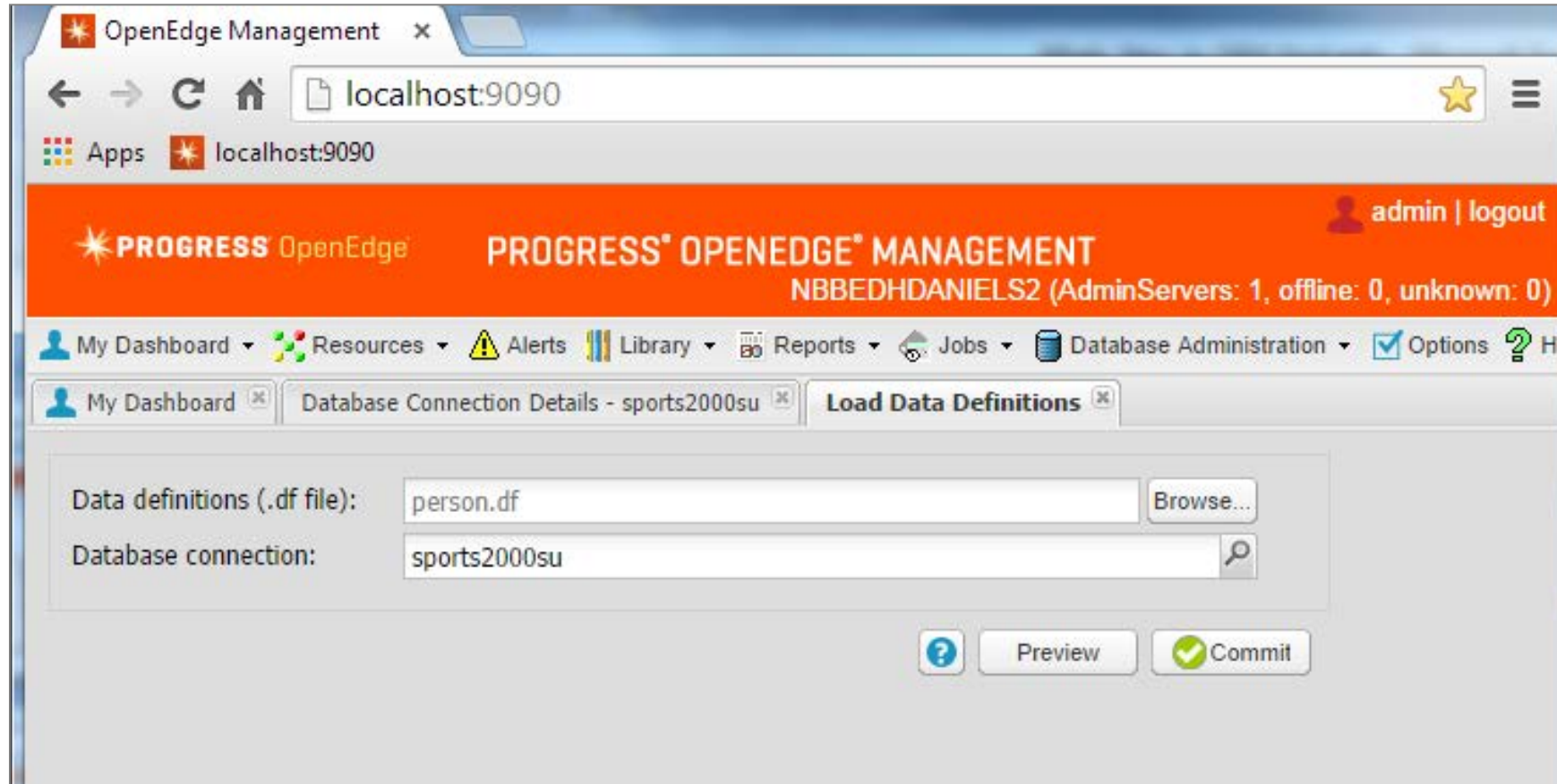
Monitor Database Table Dump

Group By

File	Table	Tenant	Group	Status	Start
<input checked="" type="checkbox"/> c:\launchfathomVaa.d	aa			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVaaa.d	aaa			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVaaaaaaa.d	aaaaaaa			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomValltypes.d	AllTypes			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVatable.d	ATable			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVxyz1.d	xyz1			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVbenefits.d	Benefits			21 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVbillto.d	BillTo			2 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVbin.d	Bin			770 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVbtable.d	BTable			0 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVchild.d	Child			23 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVctable.d	CTable			6 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVcustomer.d	Customer			1118 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVdepartme.d	Department			7 rows	2014-09-21 14:5
<input checked="" type="checkbox"/> c:\launchfathomVdtable.d	DTable			0 rows	2014-09-21 14:5

Data Administration Console – Data Administration

Load & Preview Data Definitions



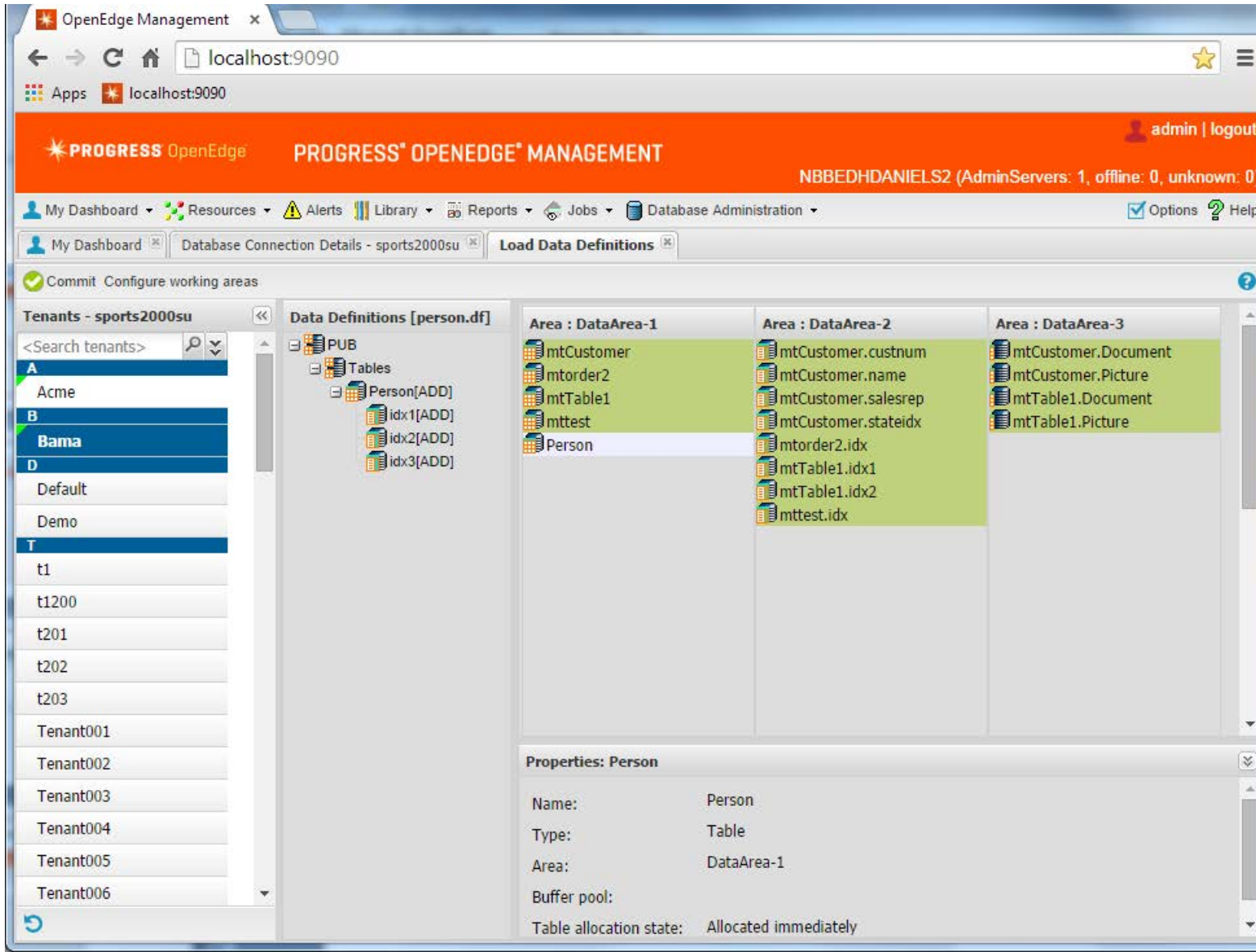
Browse Preview

- For multi-tenancy

Commit

Data Administration Console – Data Administration

Preview Data Definitions



Tenant list

- Select tenant

Data definitions

- Multi-tenant components

Allocation

- Drag & drop
- New & existing

Commit

Data Administration Console – Data Administration

Edit Sequence Values

OpenEdge Management

localhost:9090

admin | logout

PROGRESS OpenEdge PROGRESS® OPENEDGE® MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su Load Data Definitions

sports2000su Commit Restore

Edit Database Sequences

Sequence name: --Sequence name--

Sequence Name	Multi-tenant	Initial Value	Increment by	Upper Limit	Cyclic at Limit	Current Value
mtSeq1	true	5	1	200	false	Edit
mtSeq2	true	0	1		false	Edit
mtSeq5	true	0	1		false	Edit
myseq	true	100	-10	10000	false	Edit
NextBinNum	false	0	1		false	1486
NextCustNum	false	1000	5		false	3020
NextEmpNum	false	0	1		false	59
NextInvNum	false	1000	1		false	1005
NextInvTrans...	false	0	1		false	57
NextItemNum	false	100	10		false	100
NextLocalDef...	false	0	1		false	11
NextOrdNum	false	1000	5		false	6305
NextPONum	false	0	1		false	10137
NextRefNum	false	1	1		false	13
NextSupplNum	false	0	1		false	11

Page 1 of 1

Displaying sequences 1 - 17 of 17

OpenEdge Management

localhost:9090

admin | logout

PROGRESS OpenEdge PROGRESS® OPENEDGE® MANAGEMENT

NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su Load Data Definitions

mtSeq1 Commit Restore

Edit Multi-Tenant Sequence Values

Tenant name: --Tenant name--

Tenant Name	Current Value
Acme	5
Bama	5
Default	0
Demo	5
t1	5
t1200	5
t201	5
t202	5
t203	5
Tenant001	5
Tenant002	5
Tenant003	5
Tenant004	5
Tenant005	5
Tenant006	5
Tenant007	5
Tenant008	5
Tenant009	5
Tenant010	5

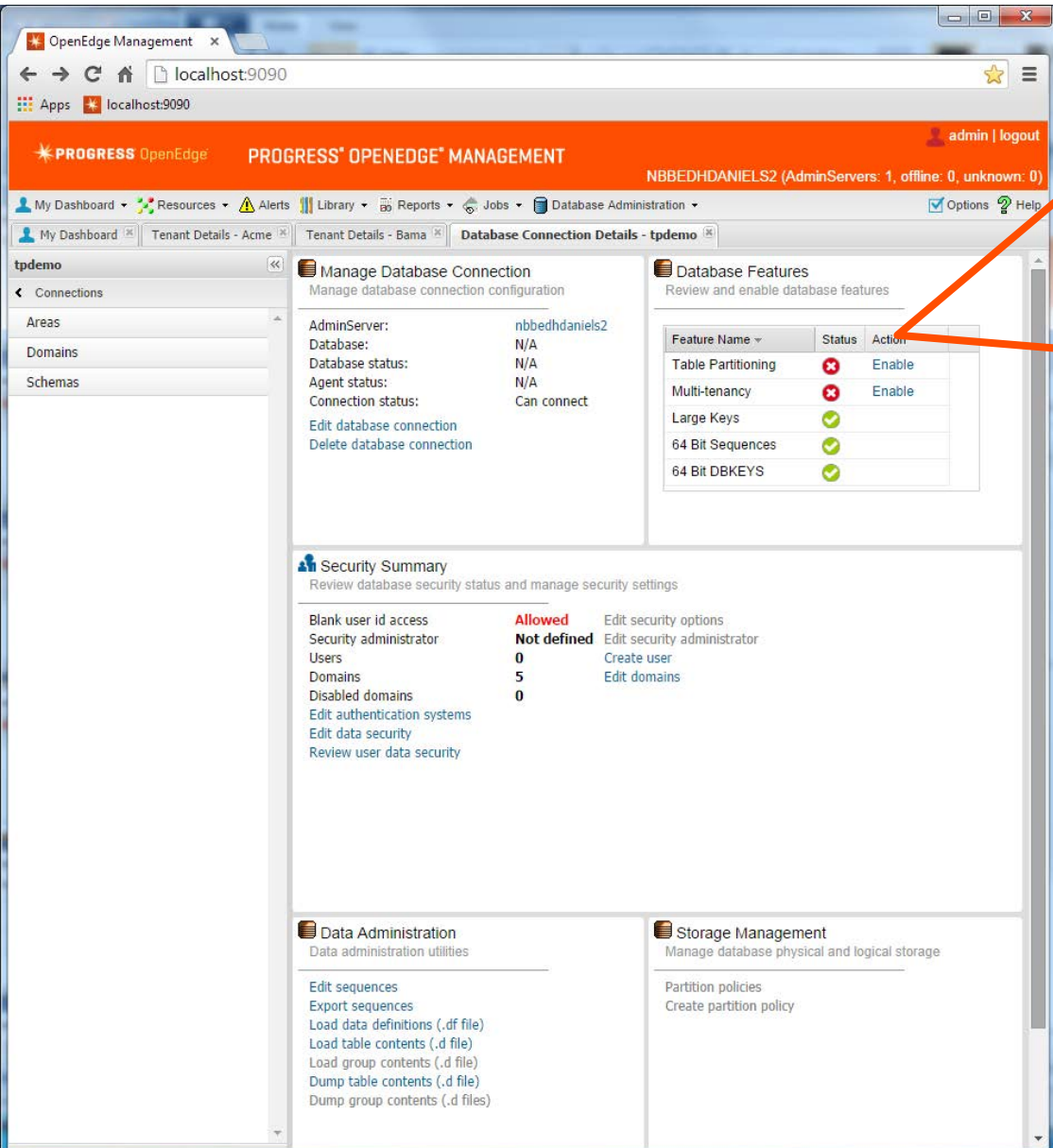
Data Administration Console – Table Partitioning Support


Features

- Enable database for table partitioning
- Wizard for Partition Policy creation
 - Auto generate details that matches values of all existing data
- Maintain Partition Policy and Details
- Generate Partition Policy creation program

Data Administration Console – Table Partitioning Support

Enable database for table partitioning





Database Features

Review and enable database features

Feature Name	Status	Action
Table Partitioning	✗	Enable
Multi-tenancy	✗	Enable
Large Keys	✓	
64 Bit Sequences	✓	
64 Bit DBKEYS	✓	

Data Administration Console – Table Partitioning Support

Create Policy Wizard – Page 1

OpenEdge Management

localhost:9090

Apps localhost:9090

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NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

admin | logout

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su

Partition Policies

Create Table Partition Policy

Specify name and description, select database and table and define default areas and allocation rule

Policy name: Mypolicy

Description:

Database connection: sports2000su

Table: MyOrder

Default data area: DataArea-3

Default index area: IndexArea-3

Default LOB area: LobArea-3

Object allocation rule:

☒ None - set new partitions not to allocate space

☐ Immediate - set new partitions to allocate space

Cancel Previous Next Finish Generate policy program

- **Name, Description**
- **Default allocation**
 - Areas
 - Allocation state

Data Administration Console – Table Partitioning Support

Create Policy Wizard – Page 2

OpenEdge Management

localhost:9090

admin | logout

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My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su

Partition Policies

Create Table Partition Policy

Specify the type, fields, and one or more local indexes for the policy

☒ Has range

Partition fields

+ Add field from table + Add fields from index x Remove Field ↑ Move field up ↓ Move field down

Field Name	Data Type	Description
CustNum	integer	Help:Name
SalesRep	character	
OrderDate	date	

Partition aligned indexes

Local	Index Name	Fields
<input checked="" type="checkbox"/>	custsales	CustNum, SalesRep, OrderDate

Cancel Previous Next Finish Generate policy program

- Has range
- Fields
- Local Indexes

Data Administration Console – Table Partitioning Support

Create Policy Wizard – Page 3

OpenEdge Management

localhost:9090

admin | logout

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NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

My Dashboard Database Connection Details - sports2000su

Partition Policies

Create Table Partition Policy

Create default partition details based on data from the table

Name template: Properties

Load partition policy details from existing data by selecting the "Load Details" button. If the table has no data, then you will need to manually add the policy details.

Please note that calculating partition details may take several seconds for very large tables.

Load Details

180 partition detail records were discovered. You may select Next to review and edit, or select Finish to accept the defaults.

Cancel Previous Next Finish Generate policy program

- Name template
- Load details
 - From existing data
- Generate Program
- Finish

Data Administration Console – Table Partitioning Support

Create Policy Wizard – Page 4

OpenEdge Management x localhost:9090

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NBBEDHDANIELS2 (AdminServers: 1, offline: 0, unknown: 0)

My Dashboard Resources Alerts Library Reports Jobs Database Administration Options Help

Database Connection Details - sports2000su

Partition Policies

Create Table Partition Policy
Edit the details of the policy

+ Add + Insert Before + Insert After + Reset + Delete

Values	Name/Description	Allocation	Default Areas	Partitions
CustNum EQ 1 SalesRep EQ BBB OrderDate LE 2010-04-22	MyPolicy-1	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ DKP OrderDate LE 2010-12-07	MyPolicy-2	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ DOS OrderDate LE 2010-03-26	MyPolicy-3 -description-	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
SalesRep EQ GPE OrderDate LE 2010-03-08		<input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Index: IndexArea-3 LOB: LobArea-3	
CustNum EQ 1 SalesRep EQ HXM OrderDate LE 2010-11-12	MyPolicy-5	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ JAL OrderDate LE 2010-07-07	MyPolicy-6	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ KIK OrderDate LE 2010-04-07	MyPolicy-7	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ RDR OrderDate LE 2010-01-08	MyPolicy-8	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 1 SalesRep EQ SLS OrderDate LE 2010-12-09	MyPolicy-9	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 2 SalesRep EQ BBB OrderDate LE 2010-07-20	MyPolicy-10	<input checked="" type="checkbox"/> Allocated <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Split-target	Data: DataArea-3 Index: IndexArea-3 LOB: LobArea-3	Partitions
CustNum EQ 2	MyPolicy-11	<input checked="" type="checkbox"/> Allocated	Data: DataArea-3	Partitions

Update Cancel

Cancel Previous Next Finish Generate policy program

Edit Details

- Name & Descriptions
- Default Areas
- Partitions

Generate Program Finish

Data Administration Console – Table Partitioning Support – Partition Policies

The screenshot displays the OpenEdge Management console interface. The top navigation bar includes the Progress OpenEdge logo, the title 'PROGRESS* OPENEDGE* MANAGEMENT', and the user 'admin | logout'. Below this, a secondary navigation bar shows various menu items like 'My Dashboard', 'Resources', 'Alerts', 'Library', 'Reports', 'Jobs', and 'Database Administration'. The main content area is titled 'Database Connection Details - sports2000su' and contains a section for 'Table Partition Policies'. This section includes a search bar for 'Policy name' and a table listing 15 policies. The table has columns for Name, Table, Type, Columns, Description, and Action. Each policy row includes an 'Edit Details' link. The table is currently displaying policy 1 of 15.

Name	Table	Type	Columns	Description	Action
aaa	DTable	List	DepartmentId, OrderDate		Edit Details
APolicy	ATable	List	afield	a	Edit Details
bbbbbb	aaa	List	aa		Edit Details
CPolicy	CTable	List	myintegerfieldwithlongname		Edit Details
HPolicy	HTable	List	afield	my policy vvv	Edit Details
IPolicy	ITable	List	afield	my policy vvv	Edit Details
OrderPolicy	hpOrder	List-range	CustNum, SalesRep, OrderDate		Edit Details
Rpolicy	RTable	Range	afield	ssddd	Edit Details
TPolicy	TTable	List	Orderdatetime	aabbbbb	Edit Details
UPolicy	UTable	List	afield		Edit Details
XTableWithReallyLongNamePolicy	XTableWithReallyReallyLongNameXX	List	FieldWithReallyReallyLongNameXXX		Edit Details
xxxxxxx	GTable	List	afield	ddddddd	Edit Details
Ypolicy	BTable	List	aField		Edit Details
ypolicy1	YTable	List	afield, bfield, cfield		Edit Details
ztable	ZTable	List	afield, bfield, cfield, dfield		Edit Details

New

Edit Policy

- Generate Program

Delete

Edit Details

- Edit
- Add
- Delete

Usability Improvements

Resources Grid

Remote AdminServer Configuration page

Navigational links

Usability Improvements

- New resource grid
- Ability to add tags
- Navigation links on all pages
- New remote AdminServer configuration page
- Revised icons/layout
- New options page

OpenEdge WebServer Support

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OpenEdge WebServer Support in OpenEdge Management

Configuration and Management through OpenEdge Explorer/OpenEdge Management

- Ability to create and delete a OE WebServer (or REST manager) instance
- Configuring properties for OE WebServer
- Managing rest applications – Deploy, Undeploy and Configuration
- Incremental publish
- Provides a REST based API interface for PDSOE
- Provides support to allow PDS to perform start and stop of the local Tomcat-in-the-box (TCIB) shipped with PDS, get its status etc.

Debugging/Developer
Improvements

Everything else

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Debugging/ Miscellaneous Improvements

- TestOsmetrics has been rewritten into a shell script
- Kill AppServer agent gracefully
- Enhanced dbagent logging
- Additional logging information in admserv.log

REST APIs support introduced for resource management functionality

- Uses standard URIs (Uniform Resource Identifier) to make a call to a web service
- Run as a java servlet; rooted at /oem/ on the machine where OEM is installed.
- Two sets- First set of APIs for Resource Management
- Second set for Database Management- requires database connection
- <http://localhost:9090/oem/api> -lists all supported APIs

Coming Up

- Complete Pacific Application Server (PAS) Support
- Table Partitioning features
 - Mark partition as read-only
 - Rename
 - Split, Merge and Truncate
- Replace SNMP Zoho Adapter with snm4j
- Log file name (LFM) date-based file name rollover
- DbAnalysis format changes support in OEM jobs
- New Operator permissions for DAC
- New Graphing implementation

The background consists of several overlapping geometric shapes in various shades of orange and brown, creating a modern, abstract pattern.

Q&A

Want to Learn More About OpenEdge 11?

- Role-based learning paths are available for OpenEdge 11
- Each course is available as Instructor-led training or eLearning
- Instructor-led training:
 - \$500 per student per day
 - www.progress.com/support-and-services/education/instructor-led-training
- eLearning:
 - Via the Progress Education Community (wbt.progress.com):
 - OpenEdge Developer Catalog: \$1500 per user per year
 - OpenEdge Administrator Catalog: \$900 per user per year
- User Assistance videos:
www.progress.com/products/pacific/help/openedge

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Visit the Resource Portal

- **Get session details & presentation downloads**
- **Complete a survey**
- **Access the latest Progress product literature**

www.progress.com/exchange2014



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