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ACS RECOGNITION OF PRIOR LEARNING **(RPL) FORM – 2019**

IMPORTANT NOTICE:

This document is required to be completed for all Recognition of Prior Learning (RPL) applications and uploaded as a PDF document (*converted from word*) to the application form. Please note scanned versions will not be accepted.

Please refer to the ACS Recognition of Prior Learning (RPL) Instruction document which provides detailed information in order to complete this form.

Applicant Name	
Applicant Email Address	
Applicant Date of Birth	

Please complete the following 2 sections:
1. **The Key Areas of Knowledge – Section 1**
2. **The Project Report Forms – Section 2**

SECTION 1 – KEY AREAS OF KNOWLEDGE

In the following expandable typing areas, explain **how you have acquired your in-depth knowledge** in these topic areas through your professional experience.

Please refer to the ACS Recognition of Prior Learning (RPL) Instruction document for more detail

ACS AUSTRALIAN
COMPUTER
SOCIETY

Essential Core ICT Area of Knowledge:

➢ **ICT Professional Knowledge**

<u>Professional Expectations:</u>

During my professional tenure at **Virginia State Police, VA**, I did the installation and configuration of standalone databases with data guard setup based on the project needs. I performed database upgrades from 11g to 12c with data guard in place. I conducted installation and configuration of Oracle Enterprise manager 12c/13c for the monitoring and maintenance of databases. I did the creation and maintenance of the users along with security roles and privileges. I carried out database monitoring and Administration activities like creating table spaces, users and roles for test environment. I performed tuning of database using various tools like Explain plan, SQL Tuning Advisor and implementing SQL profiles based on the recommendations. I generated reports like AWR, ADDM and ASH and analysing them to check the performance bottlenecks. I used OEM to monitor and manage various database activities like top SQL activities, SQL monitoring, blocking sessions and database load. I implemented Database resource manager to set the priorities of the users to use the system resources. I installed and configured the data guard in primary & Physical standby mode for DR operations. I performed database Hot and Cold backup and recovery for 10g/11g/12c databases. I took Back-up of the Database (Physical, Logical) & recovering the database at critical times. I refreshed the databases based on the project needs as and when required. I coordinated with the development team and help to resolve the DB connectivity problems. I took incremental and full backups using RMAN and moving the backups to the storage location. I managed and performed operational tasks in oracle database such as database cloning, upgrades, migrations, installations etc. cloning of databases from production using RMAN for development and test purposes. I checked the size and the availability of table spaces to the users and doing housekeeping of the data files. Furthermore, I performed data refresh and extraction of data using export data pump and import data pump.

While working at **Advanced Oilfield Technology, Muscat, Oman as Database Administrator,** I installed and configured standalone databases with data guard setup based on the project needs. I performed database upgrades from 11g to 12c with data guard in place. I did the installation and configuration of Oracle Enterprise manager 12c/13c for the monitoring and maintenance of databases. I carried out the creation and maintenance of the users along with security roles and privileges. I conducted the database monitoring and administration activities like creating table spaces, users and roles for test environment. I performed tuning of database using various tools like Explain plan, SQL Tuning Advisor and implementing SQL profiles based on the recommendations. I generated reports like AWR, ADDM and ASH and analysing them to check the performance bottlenecks. I used OEM to monitor and manage various database activities like top SQL activities, SQL monitoring, blocking sessions and database load. I implemented Database resource manager to set the priorities of the users to use the system resources. I did the installation and configuration of data guard in primary & Physical standby mode for DR operations. I performing database Hot and Cold backup and recovery for 10g/11g/12c databases. I took Back-up of the Database (Physical, Logical) & recovering the database at critical times. I worked on refreshing the databases based on the project needs as and when required. Furthermore, I coordinated with the development team and help to resolve the DB connectivity problems. I took incremental and full backups using RMAN and moving the backups to the storage location. I managed

and performed operational tasks in oracle database such as database cloning, upgrades, migrations, installations etc. I worked on cloning of databases from production using RMAN for development and test purposes. I checked the size and the availability of table spaces to the users and doing housekeeping of the data files. I performed data refresh and extraction of data using export data pump and import data pump.

Communication:

During my professional career as Database Administrator, I acquired adequate experience in supporting multiple production, development and test databases under UNIX and Solaris environments which was done with applying appropriate communication skills. I prepared the Oracle Server Installations on various UNIX Flavours like Redhat and Solaris and Creating users with proper roles and privileges. Furthermore, I carried out the installation of virtual platforms like Esxi servers and creation of vm's with required operating systems like Solaris, windows and various Unix flavours. There were appropriate interpersonal communication skills applied in the project. I did the Administration of Oracle, MS SQL and MY SQL server databases with high availability solutions like RAC, Data Guard, and ASM. I worked with security and compliance teams for the quarterly patching activities to make sure all the vulnerabilities are closed and the correct security patches are in place. I acquired adequate experience in taking Online, Offline and RMAN Backups and Managing Backup & Recovery using RMAN Scripts.

There was the AGILE methodology executed in the project and it played a vital role in getting the desired work results. The implementation was done on the fundamental communication strategy. Furthermore, I adopted the appropriate communication strategy in the project when carrying out analysis on the project objectives and achieved the results accordingly. I took effective decisions with the thorough discussions made with team members whenever the work activities were undertaken within the specified work tenure.

I as a database administrator communicated effectively with other team members which included developers, managers and other workers. There was also my responsibility to coordinate with the stakeholders and let them understand the altering requirements of the project in case if any occurred.

I carried out scrum calls execution which was specifically relied on maintaining the appropriate communication aspects in the project on regular basis. There were work activities executed in the defined project tenure which included handling numerous issues appropriately with getting the defined work results. I consistently handled the technical glitches in the project and achieved the required project results within the defined work tenure. There was decent communication framework followed in the project for obtaining the targeted work results.

I carefully prepared the user-writing documents which were based on project work activities creation and execution. I achieved the defined work results and conducted thorough research on various work factors for obtaining the targeted project results. I executed the communication methodology when conducting the research on various project related factors and obtained the results within the specified work tenure. There was an analysis conducted on the work factors and appropriate communication tricks were prepared with the considerations made on the user-guide documents.

ACS AUSTRALIAN COMPUTER SOCIETY

General ICT Area of Knowledge:
        Topic 5: ICT Management

How have you acquired this knowledge in your working environment? Illustrate your depth of knowledge.

IT Project Management:

I applied project management skills while working on various projects throughout my career. I analysed the information systems along with technology which was linked with the basic applications and directives were required to be cleared. I focused on managing the databases used from organization for driving everything from payroll and finances to market analysis. I made sure that the systems operated continually and at a higher level.

I ensured the continuous access while carrying out controlling which users were able to view and utilized information was an important aspect of the overall role. Thus, I considered the security issues as well while working on the database management. It included properly writing codes and specifying users' roles and responsibilities along with other actions which typically tied into the database digital managing side. I also worked on managing and replacing the current database and upgraded to a new one with the improvements made in the existing systems without a full-on replacement. There was regular testing carried out which assisted in ensuring continual uptime and access.

I also worked on introducing a customized database which contained customer and employee information from requirements assessment with each department head for scheduling and budget management. I solicited and serviced various design, procurement and administration of marketing data. I managed database administrative documents, carrying out database development with the project management, programming, and software design support for various related activities. I made usage of the web trends in conjunction with the database transactions for providing a comprehensive customer behavior analysis.

I learnt to generate PL/SQL scripts for data manipulation and validation which was followed with creating numerous snapshots for remote instances. I designed and developed data migrations utilizing Oracle SQL which ensured accuracy during system testing and reducing the overall implementation time.

Furthermore, I managed relationships with vendor and outsourced various activities with continuously leading numerous team on execution of DBA activities. I also configured OEM in data center for monitoring and alerting operators and DBA's.

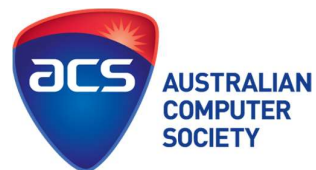**IT Governance and Organisational Issues:**

I managed the activities related to IT and database administration in an organization. I extracted more value from data and drove the mandatory approach towards obtaining the results. I prepared a process flow for data governance initiatives and it included from defining the issue and obtaining a sponsorship which further led towards evaluation of maturity levels. I also worked on obtaining different metrics and results. I handled the project in which I worked on maintaining the metadata repository and creating a data repository with the designated data. I also worked on data structures and applied

decent data governance principles for executing the job. I focused on specific governance issues and tasks were executed for obtaining the creative solutions like customizing security for the data pertaining to specific customer.

While carrying out different projects and implementing work activities for various organizations, I followed the structured IT governance process which ensured that organizations deployed their IT related investments in an appropriate manner for ensuring that the resulting activities were executed properly and obtained the desired results. I covered various aspects of IT management in the governance and the IT strategy principles along with relationship were executed accordingly with the IT management skills. I diagnosed and fulfilled the organizational requirements and covered the assets which required decent IT practices.

I evaluated the IT governance and sorted related issues as it was an essential element of corporate governance. It was related to how an organization directed and how different stakeholders work with each other for obtaining the desired financial goals. I considered various models for executing the corporate governance and decent corporate governance allowed organizations to execute the work in a productive manner. I also provided managerial accountability in the organizations.

During my work practices, I realized that the IT governance and change management were closely linked. I prepared the change management approach which was a structured approach towards individuals, organizations and teams from a present state level to a desired state in various phases. It ensured sustainable and smooth output. I executed the IT governance process which was a continuing process and it required continuous changes. I realized that the relatively simple changes resulted to have higher impact on the higher-level business processes and thus change management tools became essential to the IT governance process. I prepared an IT governance plan and it was followed with the assessment and implementation of the results against the required outcome. Also, the alterations and implementations of the revised play was mandatory for ensuring continuous improvement. I ensured that the standardized techniques and processes were executed for prompt and efficient handling of all the mandatory alteration to controlled IT infrastructure.

SECTION 2 - RPL PROJECT REPORTS

The purpose of these reports is to enable you to demonstrate your command and implementation of the Areas of Knowledge described in Section 1 of this application.

Please refer to the ACS Recognition of Prior Learning (RPL) Instruction document for more detail

Project Summary:			
	Project Name	**Start Date**	**End Date**
Project 1	**Administration, Monitoring and Maintenance of Oracle Database**	**08/2018**	**12/2019**
Project 2	**Develop, manufacture and install fingerprint identification system**	**04/2015**	**04/2016**

Project 1: Administration, Monitoring and Maintenance of Oracle Database

1. Project Summary

1.1. Identification

Client's Company Name	Virginia State Police, VA
Business Address	
Contact Numbers	
Web Address	
Email Address	
Nature of project	Conducting the frequent administration, monitoring and maintenance of Oracle Database.
Location of project	Singapore
Name of your employer	**Virginia State Police, VA**

1.2. Duration

	From	To
Total project duration	08/2018	12/2019
Your involvement	08/2018	12/2019

1.3. Resources

	Number
Your team size	06
Total project team size	10

1.4. Personal Involvement

Please list the phases of the project in which you were personally involved

Start	Completion	Phase Description
08/2018	12/2018	Oracle Clusterware implementation.
01/2019	07/2019	Backup & Recovery in Standby/RAC database.
08/2019	10/2019	Administration, monitoring and maintenance of Oracle10g RAC databases.
11/2019	12/2019	Monitoring & Tuning in RAC system.

1.5. Describe your role(s) and responsibilities in the project.

My duties were:

- I conducted the installation and configuration of standalone databases with data guard setup based on the project needs.
- I performed database upgrades from 11g to 12c with data guard in place.
- I conducted the installation and configuration of Oracle Enterprise manager 12c/13c for the monitoring and maintenance of databases.
- I carried out creation and maintenance of the users along with security roles and privileges
- I did the database monitoring and Administration activities like creating table spaces, users and roles for test environment.
- I carried out Performance Tuning of database using various tools like Explain plan, SQL Tuning Advisor and implementing SQL profiles based on the recommendations.
- I worked on generating reports like AWR, ADDM and ASH and analysing them to check the performance bottlenecks.
- I used OEM to monitor and manage various database activities like top SQL activities, SQL monitoring, blocking sessions and database load.
- I implemented database resource manager to set the priorities of the users to use the system resources.
- I did the installation and configuration of data guard in primary & Physical standby mode for DR operations.
- I performed database Hot and Cold backup and recovery for 10g/11g/12c databases
- I took Back-up of the Database (Physical, Logical) & recovering the database at critical times.
- I worked on refreshing the databases based on the project needs as and when required.
- I coordinated with the development team and help to resolve the DB connectivity problems.
- I took incremental and full backups using RMAN and moving the backups to the storage location.
- I managed and performed operational tasks in oracle database such as database cloning, upgrades, migrations, installations etc.
- I worked on cloning of databases from production using RMAN for development and test purposes.

2. Business Opportunity or Problem

2.1. Describe the business opportunity or problem(s) this project addressed.

Virginia State Police is a state government corporation headquartered in the Richmond, Virginia. The IT operations across the state are managed from this headquarters. The business opportunity specifically relied in the administration, monitoring and maintenance of Oracle database.

3. Solution

3.1. Discuss your contribution to the solution, project or engagement.

I worked on providing technical support to the Unix/DB team during the change weekend over the Bridge line. I checked the size and the availability of table spaces to the users and doing housekeeping of the data files. I managing the day-to-day activities and database maintenance. I consistently monitored the database alerts using Foglight/Blackbird/TBSM. I worked on liaising with OS, Application and network teams over the BL and support them during the change/problem resolution. I reported on errors to the next levels and assigning the ticket based on the severity of the issue and following up for the resolution. I checked the size and the availability of tablespaces to the users and doing housekeeping of the datafiles.

I performed data refresh and extraction of data using export data pump and import data pump. I supervised and performed regular database health checks and performance monitoring and tuning. I worked on performing end of day operations and reporting to the higher levels on the tasks.

3.2. Describe any design or problem solving methods you used on this project.

I proposed the design solution which was based on the installation of database software as per standards in a timely and accurate manner. Furthermore, I monitored performance, space, database parameters and tuning. I implemented test backup, recovery procedures and DR solutions. I did the coding, debugging and tuning SQL queries to improve performance. Moreover, I consistently monitored the database monitoring and Administration activities. I did the scheduling Full and Differential Backups for the user and system databases. The database creation was done as per project requirements. I carried out the creation of additional table spaces and adding data files to table spaces. I executed the monitoring of the scheduled backups, and re-firing the backups in case of failures. I took Online, Offline and RMAN Backups.

3.3. List the major deliverables of the project that you were responsible for or contributed to.

The major deliverables were related to carrying out continuous administration, monitoring and maintenance of the Oracle Database System for an organization using my expertise of database administration. All the associated milestones were accomplished with the thorough skills implementation related to oracle database management.

4. Results

4.1. Was your solution implemented? If so, describe the role, if any, you had in the implementation.

I obtained the results which were in the form of Oracle Cluster-ware implementation with backup & recovery in Standby/RAC database. I successfully carried out administration, monitoring and maintenance of Oracle10g RAC databases. It was followed with the monitoring & tuning in RAC system. Using the Oracle Database, I easily monitored the health and performance of the company's database. I also monitored the vital signs which were typically indicating the health and performance of database which later followed with analysing the workload running against the database. I also automatically identified the issues which required attention from the project management team and obtained alerts which were sorted accordingly with continuous team efforts.

4.2. *Assess the overall success or failure of the project.*

The project was the success as all the desired outcomes were achieved within the defined work timeframe. All associated work outputs were achieved within the set timeline.

4.3. **Lessons Learned**

In retrospect, what you might have done differently on this project?

There were numerous lessons learnt throughout the project and it significantly improved my database administration related skills too. However, during the work implementation, I noted that there was the option of executing the work more efficiently by splitting the tasks and adopting several other techniques. But, I opted the best possible solution at that time which was adopted after obtaining the approval from the project direct and project manager.

Project 2: Develop, manufacture and install fingerprint identification system

5. **Project Summary**

5.1. **Identification**

Client's Company Name	**Morpho Cards**	
Business Address		
Contact Numbers	Tel:	
Web Address		
Email Address		
Nature of project	Managing the database using Oracle.	
Location of project		
Name of your employer	**Morpho Cards**	

5.2. **Duration**

	From	To
Total project duration	04/2015	04/2016
Your involvement	04/2015	04/2016

5.3. Resources

	Number
Your team size	08
Total project team size	20

5.4. Personal Involvement

Please list the phases of the project in which you were personally involved

Start	Completion	Phase Description
04/2015	06/2015	Configuring Golden Gate to achieve unidirectional replication.
07/2015	11/2015	Performing data migration from SQL to Oracle.
12/2015	01/2016	Installation and configuration of standalone and RAC databases.
02/2016	04/2016	Oracle RAC database administration, troubleshooting, performance tuning and patching.

5.5. Describe your role(s) and responsibilities in the project.

My duties as Senior Oracle Database Administrator in the project were:

- I supported large-scale, massively concurrent, highly available distributed Oracle systems.
- I prepared the part of production support team that functions 24X7 handling more than 200 databases which include many mission critical and multi-terabyte databases
- I conducted root-cause analysis, troubleshoot complex technical problems, performance issues in accordance with SLA
- I supported the ETL team in data migration across the cross platforms of databases.
- I configured Golden Gate to achieve unidirectional and bidirectional replication.
- I worked on performing data migration from SQL to Oracle based on the migration plans to suit the project requirements.
- I did the installation and configuration of standalone and RAC databases based on the project needs.
- I carried out Oracle RAC database administration, troubleshooting, performance tuning and patching.
- I executed advanced backup and recovery using RMAN, Implement DR strategies and test periodically.
- I worked on upgrading and patching of Oracle single instance and RAC databases to adhere compliance.
- I automated various database administration tasks using scripting.

6. Business Opportunity or Problem

6.1. Describe the business opportunity or problem(s) this project addressed.

Morpho Cards is a **Safran Group** company that develops, manufactures, and installs fingerprint identification, face recognition, and biometric systems. The company also provides hardware, software, and consulting services for various applications in telecommunications, health, identification, and banking industries. The company manufactures SIM cards, telephone cards, voucher cards, phone cards, and smart card software tools for telecommunications applications. Thus, the work specifically in the project was fulfilling the business opportunity related to the development of the fingerprint identification system.

7. Solution

7.1. Discuss your contribution to the solution, project or engagement.

I carried out the designing, documenting, scripting, testing and implementing internally developed or vendor applications. I worked on a variety of development and maintenance projects in coordination with business owners and various development and functional teams. I worked on the performance tuning of the database in coordination with the development and application teams. I did the configuration of the Oracle 11g & 12c RAC environments on Virtual Platforms. I worked on supporting infrastructure components, including operating systems, hardware/storage configurations and networks. I did the mentoring and up skilling DBAs and contributing in technical initiatives. I implemented Oracle 12c single instance and RAC instance with data guard and tested new features and upgrade from 11gR2 databases.

7.2. Describe any design or problem solving methods you used on this project.

I provided the solution in which I managed the data using oracle database which was the rational database management system. I stored the data logically in the table spaces form and physically in the data files form.

I executed the oracle system which was dependent on the scalability, higher performance databases for driving business applications for online data processing, business analytics and data warehousing. I implemented on-demand performance from these databases for serving developing, testing, analytics and meeting the business continuity requirements. I worked on the flash stack which converged infrastructure in a flexible manner with the solution that provided the flash revolution to Oracle database. It included combining the optimum computing and networking components with all-flash storage in an integrated system which speeded up the deployment time with lower costs and reducing the deployment risk. I proposed the solution which was performing efficiently and reliably meeting the business requirements.

7.3. List the major deliverables of the project that you were responsible for or contributed to.

The major work deliverables were:
- Configuring Golden Gate to achieve unidirectional replication.
- Performing data migration from SQL to Oracle.
- Installation and configuration of standalone and RAC databases.
- Oracle RAC database administration, troubleshooting, performance tuning and patching.

8. Results

8.1. Was your solution implemented? If so, describe the role, if any, you had in the implementation.

There was successful implementation carried out based on configuring the golden gate for achieving the unidirectional replication with performing data migration from SQL to Oracle. There was also the installation and configuration executed based on the RAC and standalone databases.

8.2. Assess the overall success or failure of the project.

The project was a success as all the objectives were achieved within the specified work tenure. I evaluated each section thoroughly and accomplished the desired work results with the consistent implementation of database administration skills.

8.3. Lessons Learned

In retrospect, what you might have done differently on this project?

Various lessons were learnt throughout the project and achieved the desired results within the defined tenure. I evaluated various situations throughout the tenure and availed the Oracle database software for getting the maximum possible results.