

(SESSION 2017-2018)
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
INDUSTRIAL TRAINING REPORT

**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE DEGREE OF BACHELOR OF ENGINEERING (COMPUTER SCIENCE &
ENGINEERING)**

Submitted by

JASKIRAT SINGH BHATIA: RA1511003010011

Under the guidance of

Mrs. ANUBHA LAWANIA

Of

ORANGE BUSINESS SERVICES Ltd

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

of

FACULTY OF ENGINEERING AND TECHNOLOGY



S.R.M. Nagar, Kattankulathur, Kancheepuram District

September 2017

ACKNOWLEDGEMENT

The industrial training has been a great learning experience as well as a befitting introduction to the professional world. It would be incomplete without giving my heartiest thanks to the following.

First and foremost, I would like to extend a special thanks to our Director, Dr. C. Muthamizhchelvan, for incorporating the industrial training at such an appropriate stage of the curriculum. I would also like to thank the HOD of our department, Dr. B. Amutha for giving us the opportunity to extend our wings and experience first-hand a professional environment.

I would also like to thank Mrs. Anubha Lawania, my mentor, for ingraining in me a well of knowledge and experience in such a short time. I would also like to thank all my instructors and fellow co-workers, for making this experience happy and comfortable, yet educating.

CONTENTS

- Acknowledgement
- Company Profile
- Certificate of Training
- Declaration
- Technology
 - Introduction
 - History and Features
 - Application/Usage
- Modules of Training
- Daily Diary
- Summary

COMPANY PROFILE

Orange Business Services, the business services arm of Orange S.A., is a global integrator of communications products and services for multinational corporations.

It offers integrated communications products and services to global enterprises in cloud computing, unified communications and collaboration; which manage and integrate the complexity of international communications.

Orange Business Services was founded on 1 June 2006, through a rebranding and consolidation of the existing France Telecom businesses of Equant and Wanadoo.

It operates in over 220 countries and territories and employs over 30,000 employees in 166 countries.

We are making business life easier, every day and all around the world As a global IT and communications services provider, Orange Business Services helps companies collaborate more effectively, operate more efficiently and engage better with their customers – connecting their people, sites and machines securely and reliably. Through a unique combination of robust network and IT infrastructure, managed services and professional, reliable people, we do everything we can to offer an outstanding customer experience - helping to change business life for the better. Some facts & figures: - we have nearly 20,000 staff in 166 countries & territories - our network, the world's largest, reaches 220 countries and territories, including 88 Russian regional subdivisions and 200 Chinese cities. about our customers: - 3,750 multinationals - 2/3 of top global 100 companies - 70% of Fortune 500 financial services companies - 8 million business mobile users Our mobile operations span 17 countries and serve 113 million mobile customers, including 8 million business customers. As a founding member of the FreeMove Alliance, our mobile coverage spans 28 countries and serves 295 million customers.

Specialties

telecommunications, mobility, videoconferencing, networking, cloud computing, security, unified communications, machine-to-machine

- Website

<http://www.orange-business.com>

- Industry

Information Technology and Services

- Headquarters

La Plaine Saint Denis Paris , 93457 Cedex France

CERTIFICATE



8th Floor, Infinity Tower B,
DLF Cyber City, Phase II,
Sector-25, Gurgaon 122002
Haryana (India)

Phone : +91 124 435 8000
Fax : +91 124 414 7152
www.orange-business.com

June 30, 2017

To Whomsoever It May Concern

Internship Certificate

This is to certify that Jaskirat Singh Bhatia, Enrollment No. RA1511003010011, a student of B Tech in SRM University ,Chennai, Tamil Nadu , has successfully completed his/her Internship with us in Service Operations Team , SLAR under Anubha Lawania from June 02,2017 till June 30, 2017.

We wish him/her all the best for his/her future endeavors.

For Orange Business Services India Solutions Pvt. Ltd.


Authorized Signatory
Megha Mehta
Senior HR Consultant

Orange Business Services India Solutions Pvt. Ltd.
Formerly known as Equant Solutions India Pvt. Ltd.
CIN U72900HR2305PTC021078
Regd. Office: 8th Floor, Infinity Tower B,
DLF Cyber City, Phase II, Sector-25, Gurgaon 122002,
Haryana (India)

Orange Business Services is a trading name of the Orange group and a trademark of Orange Brand Services Limited.

Declaration

I, Jaskirat Singh Bhatia, student of B. Tech 5th semester, CSE, at SRM University, Chennai hereby declare that this industrial training report is the record of authentic work carried out by me for a period of four weeks, performed under the supervision of Mrs. Anubha Lawania.

Jaskirat Singh Bhatia

RA1511003010011

TECHNOLOGY

INTRODUCTION

Orange Business Services, the business services arm of Orange S.A., is a global integrator of communications products and services for multinational corporations.

It offers integrated communications products and services to global enterprises in cloud computing, unified communications and collaboration; which manage and integrate the complexity of international communications.

Orange Business Services was founded on 1 June 2006, through a rebranding and consolidation of the existing France Telecom businesses of Equant and Wanadoo.

It operates in over 220 countries and territories and employs over 30,000 employees in 166 countries.

HISTORY

Background of global ownership of Orange : Before May 2000

Further information: Orange (UK) § History, and Orange (telecommunications) § History

In May 2000, the Orange brand, through a complicated set of mergers and divisions, was acquired and eventually retained by Orange S.A., then a fully owned subsidiary of France Télécom. The chain of mergers that led to the May 2000 acquisition are as follows;

The inception of Orange brand was In 1990 in United Kingdom with the formation of "Microtel Communications Ltd" - a consortium initially formed by Pactel Corporation (American), British Aerospace (BAe, now BAE Systems), Millicom and Matra (French); and later, to be wholly owned by BAe. In July 1991, the Hong Kong-based conglomerate - Hutchison Whampoa through a stock swap deal with BAe, acquired a controlling stake of 65% in Microtel, who by then had won a license to develop a Personal communications network (PCN) network in United Kingdom.

Subsequently, Hutchison renamed Microtel to Orange Personal Communications Services Ltd, and on 28 April 1994, Orange brand was launched in the UK mobile phone market . A holding company structure was adopted in 1995 with the establishment of Orange plc. In April 1996, Orange went public and floated on the London Stock Exchange and NASDAQ, majority owned by Hutchison (48.22%), followed by BAe (21.1%). In June 1996, it became the youngest

company to enter the FTSE 100, valued at £2.4 billion. And by July 1997 Orange had gained one million customers.

The stint as a public company came to an end in October 1999, when it was acquired for US\$33 Billion by the German conglomerate - Mannesmann AG. The Mannesmann's acquisition of Orange triggered Vodafone to make a hostile takeover bid for the German company. Shortly thereafter, in February 2000, Vodafone acquired Mannesmann for US\$183 Billion and, decides to divest Orange as the EU regulations wouldn't allow it to hold two mobile licences. France Télécom in May 2000, announced the acquisition of the global operations of Orange from Vodafone for US\$37 Billion and the transaction was completed in August 2000.

Evolution of business services of France Telecom : 2000-2006

With the strategic ambition to become an integrated player in managed data networks and IP-based communication and hosting for multinational and local enterprises, France Telecom in January 2000 bought out its two partner's stake (Sprint Nextel and Deutsche Telekom) in the joint venture founded in January 1996- Global One for US\$3.88 Billion.

In November 2000, France Telecom acquired a controlling stake of 53% in Dutch-based network operator Equant, part of the SITA group of companies which provided network services to the air transport industry. France Telecom started the process of integrating Global One unit with Equant in 2001 and acquired all outstanding Equant stock by 2005.

Launch of Orange Business Services : 2006-present

On 1 June 2006, France Telecom announced the consolidation of the group's business services operations and rebranded the businesses of Equant and Wanadoo to a new single entity - 'Orange Business Services'. The rebranding exercise created France Telecom SA's global brand for mobile telephony, as well as all broadband and business connectivity services - Orange.

ORGANISATION AND OPERATION

It operates in over 220 countries and territories and employs over 30,000 employees in 166 countries.[30] It is organised in the following geographical divisions:

- Europe (based in Paris, France)
- Middle East & Africa
- Asia Pacific (based in Singapore, India)
- Australia
- North America
- Latin America (based in Petrópolis, Brazil)
- Russia

It has four major services centers in Mauritius, Cairo, Gurgaon and Petrópolis.

PRODUCTS AND SERVICES

It offers integrated communication products and services to global enterprises in cloud computing, unified communications and collaboration, which manage and integrate the complexity of international communications.

The service and products portfolio include,

- end-to-end enterprise integration in Data Center Management, Server Management, Network Management, PC life-cycle Management, Security Management and Messaging Administration.
- deliver and manage complex PBX, IP Voice based services, Unified Communications & Collaboration services
- ITIL-aligned methodology and processes
- Application management capabilities across verticals for CRM applications, IPT applications, Database Integration
- Remote Infrastructure Management services
- WAN-LAN integration, design and management expertise
- Cloud computing: flexible IT resources and on-demand services
- Customer contact solutions: consulting, design, implementation and management
- Mobility management: remote access, mobile SSL, secure authentication and mobile device management
- Tablets and smartphones: access, control and security for your mobile devices
- Internet of Things (M2M): tracking, geo-location, process automation, remote control, e-payment and telemetry
- Cloud computing: flexible IT resources and on-demand services
- Customer contact solutions: consulting, design, implementation and management
- Mobility management: remote access, mobile SSL, secure authentication and mobile device management
- Tablets and smartphones: access, control and security for your mobile devices
- Internet of Things (M2M): tracking, geo-location, process automation, remote control, e-payment and telemetry

FACTS AND FIGURES

Orange

- 4.2 billion euros in revenue
- 260 million customers
- 157,000 customers
- 445,000Km underwater cable

Mobile

- 28 countries
- 201 million customers
- 18 million 4G customers in Europe

Internet broadband

- 18.1 million customers worldwide
- 1.8 million fibre customers in Europe

Business

- 220 countries supplied with end to end connectivity services
- 100,000+ cloud pro customers

Orange Business Services

- 3000+ multinational customers
- 21,000+ employees dedicated to serving enterprise
- 2,000,000+ professional, small and medium enterprise and businesses in France
- 6.4 billion euros revenue last year

A Global Presence

Their group provides services for residential customers in 28 countries and for business customers in 220 countries and territories.

An international network for research and innovation

- 5,000 employees dedicated to innovation
- 6,930 patents in their portfolio
- 221 patents registered in 2015
- 726 million euros invested in 2015

Certifications

- ISO 9001 certification for quality management
- ISO 20000 certification for IT service management
- ISO 20001 certification
- ISO 14001 certification for environmental management

Awards

- Cisco gold certified partner
- Global avaya crvice certification
- Microsoft gold partner for hosting and application services
- Inmart silver partner

APPLICATIONS

Turn your IT function into an on-demand service center

- Run IT innovation programs in “start-up mode” with proof-of-concept cloud services, a fast time-to-market and instant scalability.
- Focus on your core business activities, supporting employee productivity and greater customer intimacy.
- Accelerate your geographic expansion, service diversification and revenue growth.

Ensure business continuity with integrated cloud security

- Reach the highest levels of cloud application performance with our best-of-breed solutions to route cloud traffic more effectively and efficiently.
- Choose a sovereign data center or virtual private cloud capabilities to ensure data privacy and comply with local regulations around the world.
- Select additional layers of security around your cloud infrastructure, from vulnerability scans to web filtering.

Master your budget with smarter cloud application management

- Simplify and standardize cloud and data management across the compute, storage and network layers and cloud vendor ecosystem.
- Reduce OPEX with pay-as-you-go cloud services while improving the ability of your digital business to innovate.
- Take your IT legacy into the future with a progressive and thought-through migration to the cloud.

Fast changing business models require flexibility across your organization

- IT teams need to work with different business functions to develop new innovative customer insight and interaction channels
- Service diversification and profitable growth requires the flexibility to easily add new cloud services or remove those that are outdated
- The ability to up- and down-scale capacity on demand is essential to support geographic expansion

Downtime and data loss have a significant impact on your business

- Achieving high levels of cloud application availability and performance, combined with the need for access anywhere, is a significant challenge
- Traditional IT security defenses are becoming less effective, significantly increasing your chances of being hacked
- Data privacy regulations are now more onerous around the world

Managing the lifecycle of diverse IT environments is getting more complex

- CIOs need to overcome higher regulatory, security and operational hurdles to move IT workloads to the cloud
- Employee productivity and customer experience are heavily impacted by data silos between business applications and functions
- Secure, mobile access to cloud applications for employees and customers on the move is now an expectation

Secure your digital content

- Benefit from new cloud, mobile, IoT and big data solutions in a secure way
- Fight emerging threats to protect your employees, customers and reputation while ensuring regulatory compliance

Protect your sensitive assets

- Ensure your security governance policy extends all employees and partners on a global basis
- Define your real-time access management strategy

Private Cloud

Orange Private Cloud solutions can be hosted on your premises, in Orange data centers, or a combination of both. A self-service portal lets you access a comprehensive and flexible service catalog for different managed services, from IaaS to SaaS.

We also offer a cost-effective Virtual Private Cloud solution with Flexible Computing Advanced, where you can:

- Easily manage and provision your Virtual Data Center in a multi-tenanted environment
- Scale your IT resources up or down according to your changing business needs
- Pay only for what you need

Flexible Computing Advanced is delivered through Tier 3+ Data Centers. In APAC, these are located in Singapore, Hong Kong and Sydney

Hybrid Cloud

Do you want the best of private and public clouds but are daunted by the complications of managing a hybrid?

Would you like to include and manage your business units' own public clouds as part of your organization's total cloud infrastructure?

Hybrid Cloud Management solutions from Orange Business Services enable you to:

- Reduce the complexity of managing your hybrid cloud
- Easily move workloads between different clouds, whether public or private
- Optimize cloud usage and costs
- Comply with security and corporate policy requirements

Digital and customer segmentation – APIs

Not all of our customers have the same needs. Some customers place one order per year, some place 10 orders a month, while others place 10 orders every day. So “one size fits all” is not the right approach.

At Orange, we offer various order management options to suit your unique requirements:

- If you normally place 5-10 orders a month, you’ll find our portal the most efficient solution due to its simplicity to learn and use
- If you normally place more than 50 orders per month, the portal is a convenient step towards a more practical approach of leveraging APIs for your IT integration
- If you place only a few orders, our expert team will of course support those order requests on your behalf

connectivity

- network: agnostic connectivity, Ethernet, microwave, VPN, VSAT, marine, etc.
- acceleration solutions: MPLS, CDN

data management

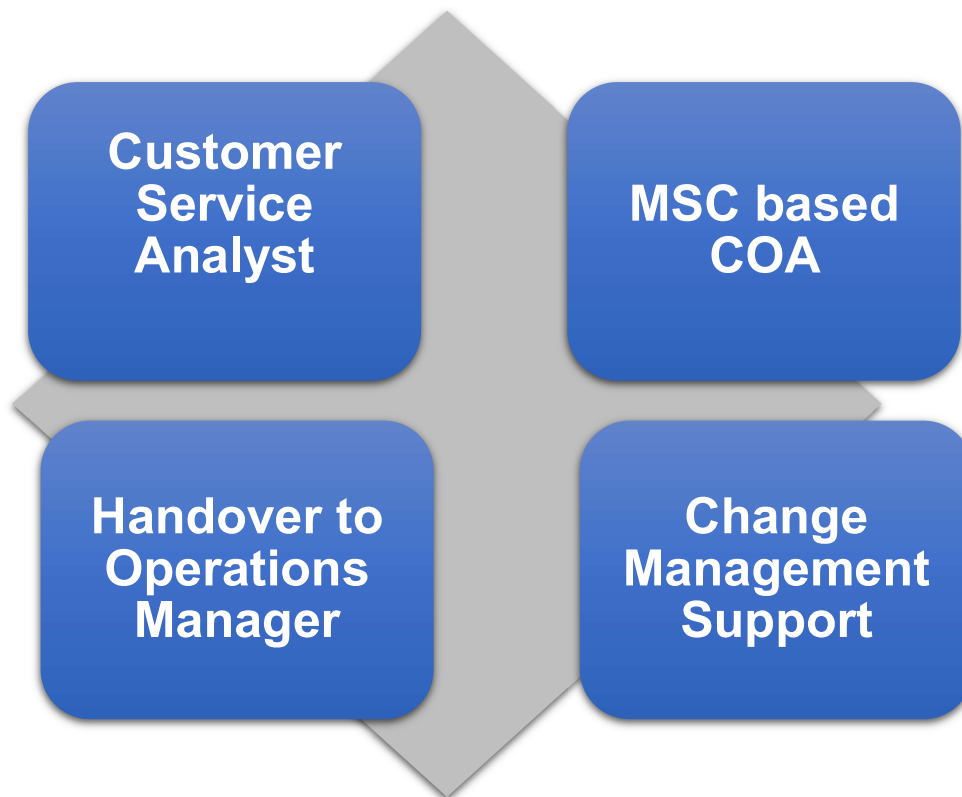
- cloud: public and private cloud
- big data transmission and storage
- managed data center, infrastructure consolidation
- data sharing and training
- collaborative tools (e.g., telepresence) for a powerful real-time collaboration environment

real-time interaction

Orange provides connectivity all the way to exploration and production locations via sub-sea cables, broadband satellite, microwave and cellular networks. This means remote sites can access the same unified communications tools and technologies as branch offices, including instant messaging, email, voice over Internet protocol (VoIP) calling, and videoconferencing.

For instance, the oil and gas industry relies heavily on scientific experts, including geologists, petro-physicists and reservoir engineers. They advise on crucial matters such as reservoir interpretation, drilling direction and well analysis. With a live video feed, experts at a central location can make quick and informed decisions about the remote site.

MODULES OF TRAINING



CSA-CSM model

- CSA's work with the CSM's (Customer Service Managers) on the assigned accounts. CSA is a non customer facing role, while the CSM interacts directly with the customer.
- Although non customer facing however CSA plays a crucial role in ensuring that the service management community provide support to the customers in a consistent and professional manner.
- CSA provides the service management community with the right set of information, analysis and recommendations so as to enable them add value to their engagements with the customers.

- CSA interlocks with various internal Orange teams to perform their day to day activities.
- The reports, audits or analysis performed by the CSA's are presented to the CSM in Excel, Word, PowerPoint, format or on SharePoint as applicable.



Incident management

- Daily, weekly, monthly incident reports. Coordinating with the service desk while auditing the incidents
- Site availability reports
- Root cause analysis and improvement plan
- MTTR and penalties calculation, SLA monitoring and reports
- Validation/audit of severity, responsible party, fault area
- Checking router logs to correlate with tools logs
- Managing device monitoring in tools

Performance management

- Path performance – RTD, PLR, Jitter monthly or on demand analysis
- Router performance – WAN/LAN load, CPU load, Memory usage monthly or on demand analysis
- MLAN switches reports – Device performance , port usage
- Backbone reporting

Backbone reporting

- Data integrity assessment across various Orange tools, monitoring the accuracy and integrity of the data
- Gap analysis and identifying the root cause for the discrepancy
- Working with the responsible entity to correct any issues/ discrepancy
- Proactively checking/monitoring for proper tool alignment

Capacity management

- Bandwidth utilization reports , bandwidth In/Out analysis - daily, weekly , monthly or on demand
- Traffic drop trend analysis
- Bandwidth usage per Class of Service
- Capacity planning and bandwidth upgrade recommendations

Change management

- Backbone / Carrier change request receipt, validating information in notification
- Identifying any data integrity issues and involving the responsible team(s) for the correction
- Analyze risk & impact assessment, stakeholder communication
- Veto and rescheduling change if required

Inventory Management

- Creating, managing and auditing inventory database/file
- Performing real time updates to the inventory database/file

Documentation

- Responsible for creating, updating and audit of Business Continuity Plan (BCP) document for all assigned customer activities
- To ensure that the BCP, connection list, contact list is any other documentation for the customer is uploaded on the GCDR portal with the latest set of information
- SOP's should be maintained for any additional activities performed

COA responsibilities

- COA supports FCC (Flexible Contact Center) service. FCC is a cloud based contact center solution offering a variety of media and applications for an outstanding customer experience
- Direct customer facing role
- Working on various reports - Real time reports, Agent Stats Dashboard, contact center report, detailed call reports, concurrent reports, CCA/BT reports
- Monthly service review dashboard
- Root cause analysis and service improvement plans

HANDOVER TO OPERATION(HOTO) MANAGER ROLES

AND RESPONSIBILITIES

Change Manager responsibilities

- Change request receipt & validation, logging change request in change register & OBS tools
- Change schedule reports and change SLA presentation
- Coordinate risk & impact assessment
- Execution follow ups with the implementation team
- Stakeholder communication, presenting change requests in various interlock calls, getting change approval from customer

HOTO Manager responsibilities

- Checking the ATP/CAT documents to ensure it is properly signed off by the customer and the test results are updated
- Checking the documentation for ATP/CAT and the Low Level Design (LLD) to ensure it is same as what is described in the scope of the order
- Stakeholders management – regular calls and interlocks
- Working with various internal teams/entities to ensure smooth handover to operations. Interlocks with ODM, VPO, STM teams
- Checking various tools and ensuring the data flow is correct to reduce any possibility of data integrity

TOOLS:-

MACHX

RS2X

SESAM

global & integrated
gini
network inventory

servicenow

 **SWAN**

MIDAS


PUTTY



Clarify CRM



Group Core Component Trouble Ticketing Tool

BMC REMEDY

Orion

DAILY DIARY

Day 1: 2nd June, Thursday:

Basic Introduction about the Company

Day 2: 3rd June, Friday:

About The Core Companies working with it

Day 3: 5th June, Saturday:

Assigned works to interns and basic introduction about NCM

Day 4: 6th June, Monday:

Met with the Senior Manager in NCM and he showed all the current working states

Day 5: 7th June, Tuesday:

Worked on NCM.

Day 6: 8th June, Wednesday:

Made a presentation on NCM info and it's characteristics.

Day 7: 9th June, Thursday:

Met with the COO and showed him the presentation, made changes as requested by them.

Day 8: 10th June, Friday:

Met different colleagues and got a few suggestions regarding data center

Day 9: 11th June, Saturday:

Worked on clarify

Day 10: 13th June, Monday:

Meeting with the supervisor and COO gained more information of how the team is organised to work and made a presentation on it.

Day 11: 14th June, Tuesday:

Started to work on Midas

Day 12: 15th June, Wednesday:

Met with the Head Team of the Midas Software.

Day 13: 16th June, Thursday:

New beta version of Midas was out. Worked on it

Day 14: 17th June, Friday:

Managed to find several flaws in the software

Day 15: 18th June, Saturday:

Still working on finding more flaws in the software

Day 16: 20th June, Monday:

Senior Manager Showed the flaws he found out and compared the flaws

Day 17: 21th June, Tuesday:

Talked to the other team members :Samuel and Baeta and talked about their jobs as a CSM(Customer Service Manager). They were from London

Day 18: 22nd June, Wednesday:

Discussed the flaws in MIDAS with Smuel and Baeta

Day 19: 23rd June, Thursday:

Reported the flaws to the Midas programmer.

Day 20: 24th June, Friday:

Final testing on the Midas version.

Day 21: 25th June, Saturday:

Midas new version was out today, had a relaxation day.

Day 22: 27th June, Monday:

Worked on router discrepancy reports

Day 23: 28th June, Tuesday:

Made a presentation on outer discrepancy

Day 24: 29th June, Wednesday:

Worked on my final presentation.

Day 25: 30th June, Thursday:

Showed the Presentation to the Team and worked on possible changes

CONCLUSION

I would like to conclude this report by once again thanking the Director of Engineering and Technology Dr. C Mutamizhchelvan ,HOD Dr. B Amutha , my Class Incharge and the faculty in charge of my Industrial Training Mr Senthil Kumar

I would also like thank Mr. Anubha Lawania, Senior Analyst, Orange Business Services Pvt Ltd for providing me this internship which proved to be a fruitful experience where I was able to gain hands on experience about the SLAR(Service Level Analysing and Reporting) in the corporate field.

The Internship has given me insights into the incident management, performance management, data integrity, documentation, change management, inventory management and capacity management.

I would like to conclude by saying that this Internship greatly benefitted me and has helped me understand the needs in the corporate world.