## 2.2 Roles & Responsibilities



Note: This page is still a WIP and subject to changes.

## **Purpose**

This page aims to outline the various roles and their responsibilities within the Cloud Factory.

- Purpose
- Cloud Team Lead
  - Broad Description
  - Main Duties & Power
    - Managing the product
    - Planning & prioritizing the work
    - · Contribute to personnel mgmt. & development
  - Typical Skills & Background
  - Artifacts in the area of responsibility
  - Must NOT:
- Product Owner
  - Broad Description
  - Focus Areas
  - Main Duties & Power
    - · Managing the product
    - Setting targets & work priorities
    - Participating in the Cloud Team development
  - Typical Skills & Background
  - · Artifacts in the area of responsibility
  - Must NOT:
- SRE Lead
  - Broad Description
  - Main Duties & Power
    - Drive SRE initiatives and establish SRE practices
    - · Lead SRE capabilities & offerings
    - Chapter Upkeep
  - Typical Skills & Background
  - · Artifacts in the area of responsibility
  - Must NOT:
- Cloud Platform Engineer
  - Broad Description
  - Main Duties & Power
    - Cloud Engineering
    - Cloud Architecture
  - Typical Skills & Background
  - · Artifacts in the area of responsibility
  - Example Position Descriptions
- Cloud Platform Architect
  - Broad Description
  - Main Duties & Power
    - Architecture Advisory
    - · Security and compliance
  - Typical Skills & Background
  - Artifacts in the area of responsibility
- · Site Reliability Engineer
  - Broad Description
  - Main Duties & Power
    - SRE Chapter Development & Initiatives
    - SRE DevOps
  - Typical Skills & Background
  - · Artifacts in the area of responsibility
- DevSecOps Engineer
  - Broad Description
  - Main Duties & Power
    - Codify Security Controls
    - Operational Support for Security
  - Typical Skills & Background

- Artifacts in the area of responsibility
- Toolchain Specialist
  - Broad Description
  - · Main Duties & Power
    - Manage CI/CD Toolchain & Practices
    - Manage SRE Toolchain
  - Typical Skills & Background
  - Artifacts in the area of responsibility
- Platform Specialist
  - Broad Description
  - Main Duties & Power
    - Manage Integration/Hub Services
    - Provide Operational Support
  - Typical Skills & Background
  - Artifacts in the area of responsibility
- Scrum Master
  - Broad Description
  - Main Duties & Power
    - Supporting the Product Owner
    - Supporting the team
  - Typical Skills & Background
  - Artifacts in the area of responsibility
- Organizational Change Manager (OCM)
  - Broad Description
  - Main Duties & Power
  - Typical Skills & Background
  - · Artifacts in the area of responsibility
- Technical Writer
  - Broad Description
  - Main Duties & Power
  - Typical Skills & Background
  - · Artifacts in the area of responsibility

## Cloud Team Lead

## **Broad Description**

- 1. Responsible for managing a group of products to achieve the Cloud Team's business goals.
- 2. Responsible for the Cloud Team's key performance indicators depending on its tasks (such as P&L, NPS, market share, systems availability (uptime, number of incidents), etc.)

Planning & prioritizing the

work

- 3. -Maintain IaC code base
  - -Support all landing zones & shared components
  - -Site Reliability Engineering
  - -Operational support for non-laaS workloads (in a fully managed model) excluding database & network
  - -Train others to support non-laas workloads (in a base estate model)
- 4. -Develop the cloud platform
  - -Design & build new cloud components & shared services
  - -Develop & maintain Infrastructure as Code blueprints
  - -Train project teams to effectively utilise the self-service capabilities



Main Duties & Power

## Managing the product

Contribute to personnel mgmt. & development

• Lead the formulation of the Cloud Team and product teams **mission and goals** 

 Define vision for the Cloud Team, make product lifecycle decisions (piloting, scaling, decommissioning, etc.)

- Define and enforce quality standards (non-functional requirements)
- Interact with Cloud Master Architect to u nderstand the key properties and changes to technology infrastructure and determine best way to work with tech restrictions
- Accept significant deliverables
- Shape the Cloud Team backlog: define and prioritize streams and epics for the Cloud Team
- Synchronize the product vision with Product Owners in product teams
- Quarterly business planning for the Factory, preparing a Quarterly Business Review (QBR)
- Set goals during release planning
- Design and maintain the products roadmap
- Manage expectations of all stakeholders

- Create an atmosphere of confidence and trust in the Cloud Team and motivate to fulfill Cloud Team's tasks
- Make proposals on the Cloud Team's co mposition and headcount
- Manage the Cloud Team budget

## Typical Skills & Background

- · Business expert with a high standing in the organisation or experience from leading roles in the industry
- · Several years of experience in people management in an organisational unit with 20+ employees
- · Several years of experience with a significant P&L responsibility
- Pragmatic, enabling and motivational people leader without micromanaging approach

#### Artifacts in the area of responsibility

- 1. Cloud Team roadmap
- 2. Factory/supersprint backlog
- 3. QBR (Quarterly Business Review)
- 4. Cloud team streams/programs
- 5. Descriptions of streams and products vision



#### **Must NOT:**

- · Make decisions about execution methods
- Build a hierarchy within the Cloud Team
- Micromanage, impose instructions on Cloud Teams
- Penalize Cloud Team members
- · Assess Cloud Team members peremptorily and in his or her own discretion
- Evade decision-making

#### **Product Owner**

## **Broad Description**

- 1. A member of the Cloud Team responsible for releasing a product that meets the customer's needs to achieve the Cloud team goals.
- 2. Responsible for defining and prioritizing requirements (stories) in the Cloud team Backlog and also accepts requirements (stories) as completed.

#### Focus Areas

- Consider Cloud Factory's Multicloud Platform in planning and delivery of all work
- · Take ownership of end to end Customer requirements and product lifecycle for all service delivery in Cloud Factory
- Inward looking: Manage NGO contract for Cloud Platform Service Delivery
- Outward looking: Ensure Cloud Platform and Services meet Customer requirements



#### **Main Duties & Power**

## Managing the product

 Develop product vision and synchronise it with the Cloud Team Lead and Product Owners in Cloud teams responsible for related products

## Setting targets & work priorities

 Build product team backlog in terms of user stories, prioritize its items to achieve business goals, and dynamicall

## Participating in the Cloud Team development

 Responsible for defining the set of necessary competences in the product team, in cooperation with the

- Define product requirements; make sure they are complete, integral and consistent; the sole source of requirements for the product team
- Integrate usability studies and research into product requirements to enhance user satisfaction and ensure a customer-driven design
- Communicate changing priorities and their impact to the team
- Facilitate release planning with stakeholders and regular demo sessions

- y adapt the backlog based on user feedback and product learnings
- Define sprint goals and manage the pr oduct backlog/roadmap
- Hold meetings with the product team to update the product team backlog
- Make sure the product team correctly understands the requirements
- Participate in planning of the product team's sprint, planning of the Cloud Team's supersprint to reaffirm priorities and clarify the requirements
- Interact with other product teams as part of the Cloud Team's organisation ceremonies to implement cross-product team tasks

Master Cloud Architect and Community of Practice Leads

#### **Typical Skills & Background**

- Several (often 5+) years of strong experience owning and delivering digital products
- Ability to communicate effectively in multiple business areas (e.g., marketing, sales, finance, operations, technology)
- Background that comprises both solid business understanding as well as high level understanding of high-quality digital product delivery

#### Artifacts in the area of responsibility

- 1. Product team backlog
- 2. Sprint backlog (in terms of relevance of priorities and clarity of requirements)
- 3. Product roadmap
- 4. Definitions of Done / Acceptance Criteria
- 5. Product vision



- Micromanage, impose instructions on the product team
- Play "boss" to the product team, make prescriptive decisions about execution methods
- Build a hierarchy within the product team
- Assess product team members peremptorily and in his or her own discretion
- Penalise product team members
- Evade decision-making

## SRE Lead



To be validated and updated by SRE lead

#### **Broad Description**

- 1. Evolve and manage SRE capability and team within BHP Cloud Factory.
- 2. Evolve and manage the SRE roadmap, adoption framework, and establish the ways of working within the BHP Cloud team.
- 3. Evolve and manage a product's SLA/SLO/SLI agreement framework.
- 4. Develop, implement, and maintain monitoring and observability, and DevOps practices & tools for SRE managed products.
- 5. Evangelize the SRE and DevOps practices to other BHP Cloud Factory customers.
- 6. Establish SRE ways of working to ensure resilient cloud design and implementation practices are embedded into solutions during early stage of product life cycle development.
- 7. Lead the identification and management of Toil through the Cloud team.
- 8. Review, analysis and improvement development of deployed products with respect to product architecture and inter-service dependencies
- 9. Drive SRE initiatives through evangelism, facilitating training and workshops, and the promotion of adopting the SRE capability
- 10. Lead SRE engagements by facilitating training sessions, workshops and service onboarding, as well as establish touch points with engaged teams
- 11. Perform chapter upkeep duties.



Main Duties & Power

# Drive SRE initiatives and establish SRE practices

- Manage SRE roadmap, adoption framework, established ways of working with Cloud Factory, extended support teams, and customers.
- Define and measure against valuebased metric on the performance of the SRE function.
- Lead and manage the SRE capabilities and service offerings.
- Defined SRE procedures like Toil Identification & Reduction, Observability Framework, SRE 1st response, SLA/SLI Framework.

## Lead SRE capabilities & offerings

- Provide on-demand consultation to teams adopting the SRE Fully Managed Landscape Model
- Ensure SRE supported services are meeting the established SLA.

## **Chapter Upkeep**

- · Facilitate SRE Chapter cadences.
- Manage the resourcing plan to ensure SRE resources are meeting CF demands.
- Manage the resourcing upskilling.
- Manage SRE rotation to ensure continuous relevance of SRE resources.
- Manage toil identification and reduction initiatives.

#### **Typical Skills & Background**

- Advanced understanding of business technology drivers and their impact on architecture design, performance and monitoring, best practices and BHP policies
- Good understanding of Site Reliability Engineering (SRE) and DevOps
  philosophies, technologies, platforms and tools, SLA management, incident
  resolution, and automation
- Minimum of 4 years of experience automating tasks and writing tools in a scripting
- Minimum of 4 years of incident resolution experience in an large scale operations environment

#### Artifacts in the area of responsibility

- 1. Observability Framework
- 2. SRE Resourcing Plan

language (e. g. Python)

- 3. SRE Upskilling & Training Plan
- 4. SRE Toil Management (Identification and Reduction Initiatives)
- 5. SRE Roadmap
- 6. SRE 1st Response, and Blameless Post-Mortem.
- 7. SRE Demand Management
- 8. Supported SRE Services SLA performance

#### **3**

#### **Must NOT:**

- Micromanage, impose instructions on the product team
- Play "boss" to the product team, make prescriptive decisions about execution methods
- Build a hierarchy within the product team
- Assess product team members peremptorily and in his or her own discretion
- Penalise product team members
- Evade decision-making
- Engrossed in the tools selection but on the capabilities offered by available services.

## Cloud Platform Engineer

#### **Broad Description**

- 1. Drive technology decisions to develop the cloud infrastructure and platforms through automation
- 2. Deliver best in class production grade software solutions across a breadth of different platforms and technologies
- 3. Co-develops initial release candidates for cloud offering
- 4. Embedding all required cyber controls needed to secure the developed cloud component

## Main Duties & Power

## **Cloud Engineering**

- Leverage cloud engineering expertise for a specific Cloud Service Provider (e.g. AWS / Azure) to architect and implement reusable components (Cloud services)
- Assist with creating new reusable cloud blueprints to support new applications and use case requirements
- Working on technical spikes to test new approaches and services to solve requirements

## Typical Skills & Background

- Hands-on skills working with SQL and No-SQL databases
- Experience with cloud infrastructure such as AWS, Azure or Google
- Knowledge of Agile/Iterative development, test-driven development
- Experience with cloud infrastructure such as AWS, Azure or Google
- Experience with Cyber Security, controls and best practices

#### Artifacts in the area of responsibility

1. <To be updated>

#### **Example Position Descriptions**

Cloud Engineer PD

## Cloud Platform Architect

#### **Broad Description**

- 1. Provide architecture advisory, architecture review and support for infrastructure deployment in the cloud environment
- 2. Ensure all solutions adhere to security and compliance controls, and BHP standards



### Main Duties & Power

#### **Architecture Advisory**

- Lead platform architecture design
- Participate in architecture and design review
- Provide technical leadership on the architecture and development of the platform, to Cloud Factory and customers
- To ensure that the architecture is technically coherent and futureproof across the squad.

## Security and compliance

- Design and implement platform aligned with DevOps, automation, security and compliance best practices
- Enforce compliance of all future cloud decisions within BHP with approved, standards and blueprints.

#### Typical Skills & Background



#### To be validated

- 5+ years of enterprise architecture, infrastructure and/or solution delivery experience
- 3+ years delivering enterprise solutions in a cloud platform (Azure preferred)
- AWS or Azure Architect certification
- Experience leading development teams, coaching, and evaluating performance
- Experience with Agile/Scrum methodology
- Familiarity with networking and security components at scale in a regulated industry
- Experience developing software architectures and components
- Experience with laaS, PaaS, CaaS and serverless capabilities on cloud platforms

#### **Cloud Architecture**

 Working alongside Cloud architects to consider how to best architect the Cloud platform to support new requirements

## Artifacts in the area of responsibility

1. Cloud Platform HLD

## Site Reliability Engineer

#### **Broad Description**

- 1. Build and maintain SRE observability tools and components.
- 2. Toil identification and reduction initiatives.
- 3. Oversee production operations and the development/engineering of solutions to maximize system reliability and automation for supported services.
- 4. Manage a product's SLA/SLO/SLI based on agreed terms.
- 5. Perform incident response and participate in blameless post-mortem for supported services.
- 6. Perform chapter upkeep duties.



Main Duties & Power

## **SRE Chapter Development & Initiatives**

- · Employ advanced monitoring practices and technologies to detect and automatically resolve platform issues before they impact the customer's experience
- Propose SRE initiatives to be tackle at the Chapter level.
- Build and operate SRE observability and alerting stack
- Identify and automate measurement of operations KPIs.

#### **SRE DevOps**

- To be updated
- Ensure availability and performance of the supported products.
- Engage product/platform teams to implement SRE practices and achieving operational excellence.
- Provide reports on performance and reliability to assist in strategic decision making
- Participate in toil identification and reduction initiatives.
- Participate in SRE incident response and service management activities. Related to supported services only.

#### **Typical Skills & Background**



To be validated

- 8+ years of software development experience with a degree in Computer Science or equivalent professional experience.
- · Experience working with mature development practices and tools for source control, security, and deployment.
- Experience working with Agile methodologies.
- Experience with Databases, Linux OS, and Authentication/Authorization
- Experience with Cloud platforms and Public Cloud providers

#### Artifacts in the area of responsibility

1. <To be updated>

## DevSecOps Engineer

#### **Broad Description**

- 1. Codify security controls into the platform, solution and modules
- 2. Operational support for Security



Main Duties & Power

## **Codify Security Controls**

## **Operational Support for Security**

- To be updated
- Codify security controls into the platform, solution and modules
- To be updated
- · Monitoring and alerting, on-call, incident response

- Manage security reports and adhere to BHP compliance and security standards within the CI/CD pipeline
- Provide expertise and best practices for implementing cloud security and product security
- Design, integrate and maintain DevSecOps CI/CD and operational platforms

· Service Requests, Incident Management

#### Typical Skills & Background

- To be updated and validated
- Strong (4+ years) experience/knowledge of virtualization (VMWare, etc.)
- Strong (2+ years) knowledge or experience of Ansible tool

#### Artifacts in the area of responsibility

1. <To be updated>

## **Toolchain Specialist**

#### **Broad Description**

- 1. Manage Cloud Factory CI/CD Toolchain and Practices
- 2. Manage SRE Toolchain



Main Duties & Power

## Manage CI/CD Toolchain & Practices

- To be updated
- Work with modern automation and configuration management tools to automate DevOps tasks (e.g. code commit, testing etc.)
- Develop and deploy common reusable blueprints utilizing the CI /CD pipeline

## **Manage SRE Toolchain**

- To be updated
- Employ advanced monitoring practices and tools to detect and resolve platform issues before it impacts the customer's experience
- Build on-call and incident management practices and operate related tooling
- Define SRE monitoring tooling requirements
- Drives automation and improvement of the applications in the portfolio to continuously improve service reliability, sustainability and performance. This includes supporting Cloud Acceleration and Implementation.

#### **Typical Skills & Background**



To be updated and validated

- In-depth knowledge of laaS and PaaS technologies
- Experience in CodeCommit, CodeBuild and CodePipeline to utilize the array of options for enabling a continuous integration (CI/CD) environment on AWS
- Infrastructure as Code knowledge
- Experience with CI/CD principles, practices and tools
- Experience with GitLab or other version control systems

## Artifacts in the area of responsibility

1. <To be updated>

## Platform Specialist

#### **Broad Description**

- 1. Manage Integration/Hub Services
- 2. Provide Operational Support



Main Duties & Power

## **Manage Integration/Hub Services**

#### To be updated

- Design and build platform capabilities and incorporate the necessary automation and tool configurations that ensure agile
- Design and implement practical processes and tools to enable application teams to consume a scalable and extensible infrastructure platform with security guardrails built in
- Support the delivery and use of platform services in the organization and continue to improve these platform services
- Help implement and improve development CI/CD software pipeline

#### **Typical Skills & Background**

To be updated and validated

To be updated

#### Artifacts in the area of responsibility

1. <To be updated>

#### Scrum Master

#### **Broad Description**

The Scrum Master supports the team by maintaining process best practices and proactively identifying and removing blockers to team performance. It is the Scrum Master's role to teach the team relevant agile practices, facilitate ceremonies, remove impediments and shield them from external distractions. The Scrum Master brings the Product Owner and the team together and helps them understand each other.

- 1. Work closely with the Product Owner to ensure Product Backlog is refined and prioritized towards achieving business value
- 2. Facilitate Scrum events



Main Duties & Power

### **Supporting the Product Owner**

### To be updated

- Assist the Product Owner with grooming and maintaining the product backlog
- Assist the Product Owner to prepare for Program Increment Planning Sessions
- Project planning and management assist with defining the scope for each sprint
- Bright Spot: raise/contribute/facilitate
- PI Objectives Tracking (after every 2 sprints)
- Risk Register

### **Provide Operational Support**

#### To be updated

- Support incident management by investigating/performing root cause analysis and resolving technical issues
- Perform critical maintenance, deployment of new features and fixes using the CI/CD pipeline, including occasional post-office hours support
- Apply and promote the use of templates/patterns and best practices

## Supporting the team

#### To be updated

- Prepare and present the status report from Engineering and Operations
- Shield the team from distraction/ escalation/ customer
- Understand the outcome and how it links to each sprint goal
- · Facilitate the following Scrum events Daily Stand-up , Sprint Planning, Backlog refinement, Sprint review and Sprint Retrospective
- Build a safe environment and a culture of trust where problems can be raised without the fear of blame, with an emphasis on problem solving
- · Promote and demonstrate core agile principles of collaboration, prioritization, team accountability and visibility
- Facilitate discussion, decision making, and conflict resolution

- Continuously seek to improve team performance by promoting joint accountability for results and solving productivity issues
- Accountable for the monitoring and escalation of squad member performance, identification of skill gaps and supporting recruitment activities.
- Report performance issues to respective Line managers (CTS /Contino)
- Facilitate discussions leading to collective decision-making, goal setting and conflict resolution within the team
- Continuously seek to improve agile ways of working, ceremonies and reporting through application of feedback and lessons learnt
- Proactively identify and remove blockers to team performance
- Actively manage risks and external dependencies drawing in team members as appropriate
- Create and maintain the appropriate channels for open communication within the team (e.g. tracker boards, JIRA) to create a trusting and safe team environment

#### **Typical Skills & Background**



- Understanding of common Agile frameworks and development practices including DevOps
- Understanding of Software Development Life Cycle methodologies and practices
- · 3+ years of experience with IT Project Management processes, re-engineering of processes to improve efficiency and quality
- Experience with Scrum/Agile methodologies including SAFe (Scaled Agile Framework)
- Sufficient level of technical background to provide highly-credible leadership to development teams and to be able to accurately and
  objectively evaluate complex project risks and issues
- Well versed with work management tool JIRA
- Knowledge of numerous well-documented patterns and techniques for filling in the intentional gaps left in the Scrum approach (e.g. Burn down techniques, Retrospective formats, bug handling, etc.)

#### Artifacts in the area of responsibility

- 1. Charts Sprint Burn down, Velocity
- 2. Scrum board (Jira)
- 3. Sprint Report Cadence with Ximena
- 4. Dependency Tracking and Resolution
- 5. Monthly Operational Performance
- 6. TTO tracking via Monthly SLA reporting
- 7. Facilitate in PI Closeout Artifact
- 8. Facilitate in PI Planning Execution:
  - a. Leading Breakout Sessions
  - b. Leading Dependency Resolution Sessions
  - c. Leading Problem Solving Sessions
  - d. Reporting in Scrum of Scrums
  - e. Managing Program boards for the respective Squad

## Organizational Change Manager (OCM)

#### **Broad Description**



- Diagnoses the change environment, defines and articulates the case for change, and determines the approach, tools and methods required to successfully deliver the change.
- Assesses change impacts to prepare integrated change management plans, manages change readiness and resistance, and upskills leaders
  and impacted stakeholders in the adoption and successful delivery of the change.
- Evaluates the success and sustainability of change initiatives, delivers plans and mitigates risks to facilitate the delivery of successful, sustainable and value adding change.
- Conducts presentations and facilitates workshops using storytelling to connect, influence and engage the audience.
- Determines the underlying cause of problems and evaluates multiple solutions to ensure a planned and structured approach to solving complex problems.
- Identifies, engages and manages a range of diverse internal and external stakeholders.

- Knows our customer and is obsessed with meeting their needs.
- Strives to achieve 100% safety, 100% customer value and 0% waste.
- Engages the capabilities of the entire organisation.
  - Main Duties & Power
- To be validated
- Developing change management plans for projects and/or change initiatives.
- Evaluating the impact of planned organizational change which spans across multiple layers ranging from strategy & operating model, service
  catalogues, roles and responsibilities, capability development and learning needs, policy + process + procedure, and technology and work
  culture
- Identifying risks and developing risk mitigation tactics.
- Identifying and managing anticipated resistance to change.
- Leading change management work streams with a structured methodology / process.
- Supporting development of communications relevant to change initiatives.
- · Providing coaching and training to employees at all levels.
- Defining success metrics and measuring performance against these.
- Providing reporting and other updates to management and project teams.

#### **Typical Skills & Background**

- To be validated
- Strategic business analysis skills, knowledge of contemporary business models and ability to align total operating model, services and structure to change vision
- Trusted change advisor with the ability to influence key stakeholders from across the organization
- Deep expertise in the "people side of change" including psychological, cultural, political and behavioral drivers and challenges to adoption and sustainability of change efforts
- Design mindset and vocal advocate of customer based design, innovation, systems thinking and futures literacy
- Extensive experience across multiple domains -
  - Good understanding of change management principles, techniques & tools.
  - business case development
  - benefits and value realization
  - change risk management
  - · communications and engagement
  - stakeholder management
  - · change complexity assessment and impact analysis
  - · learning and capability development
  - business readiness
  - · end user support and adoption, and
  - resistance management
  - Conflict resolution and negotiation skills.
  - Good listening and communications skills.
  - Strong business acumen
  - Analytical mindset and critical thinking.
  - Able to cope with pressure.
  - Good problem-solving skills.
  - · Team player & able to collaborate with other

## Artifacts in the area of responsibility

- To be validated
- 1. Change Vision
- 2. Change Approach / Strategy
- 3. Change Complexity Assessment
- 4. Change Impact Analysis
- 5. Communication & Engagement Plan
- 6. Stakeholder Register
- 7. Training / Learning / Capability Development Plan
- 8. Readiness Assessment
- 9. Risk Register
- 10. Lessons Learnt

- 11. Sustainability Plan
- + various lower level artifacts in the execution of these change components.

## **Technical Writer**

## **Broad Description**

1. To be updated



• To be updated

• To be updated

## Typical Skills & Background

To be updated and validated

## Artifacts in the area of responsibility

1. <To be updated>