

**Power
Week**

Université IBM i 2019

22 et 23 mai

IBM Client Center Paris

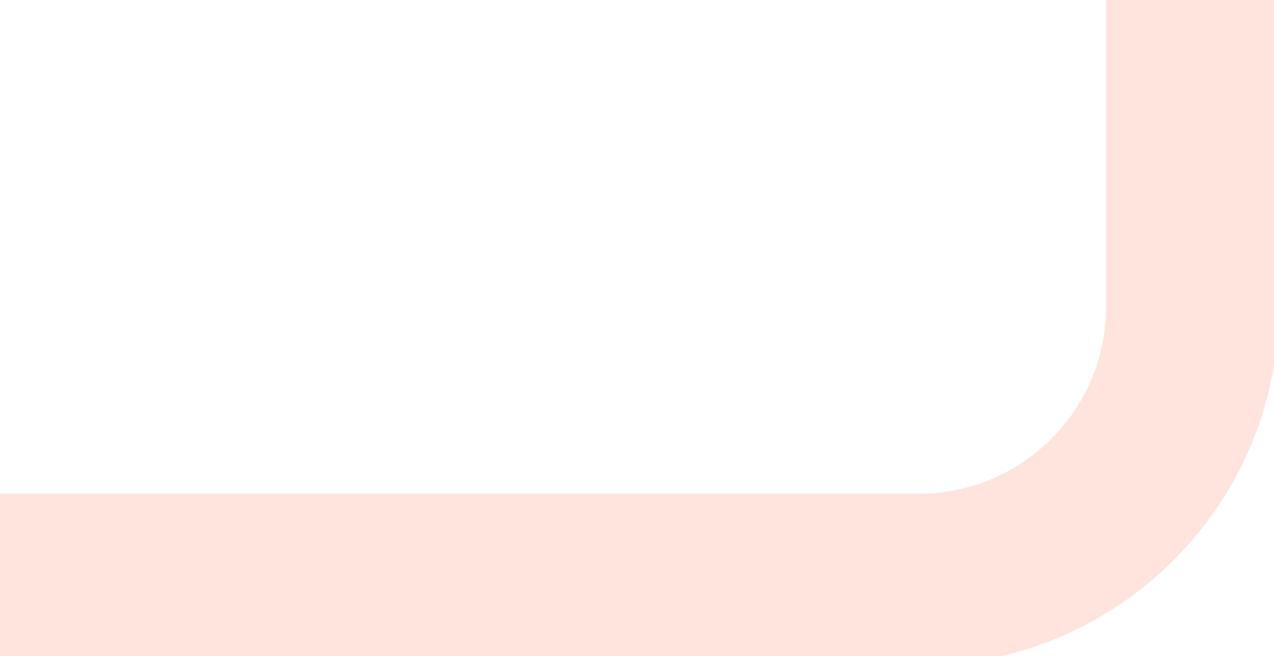


**S20 – Gestion des changements et supervision des
traitements IBM i, Windows et Linux**

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Agenda

- Présentation SMA
- Evolution des besoins d'Automatisation
 - DevOps
 - Cloud
 - Sécurité
- Présentation OpCon
 - Plate-forme d'automatisation OpCon
 - Automatisation dans le Cloud: API, connecteurs et sécurité.
 - OpCon Deploy
 - OpCon Vision
- Q/R.



Présentation SMA

Présentation SMA



Pure Player
Depuis 1980
+ 750 clients
24/7 support

EXPERTISE - INNOVATION

Spécialiste mondial de solutions d'automatisation

PLATEFORME D'AUTOMATISATION DIGITALE

Présence globale – HQ Houston, TX

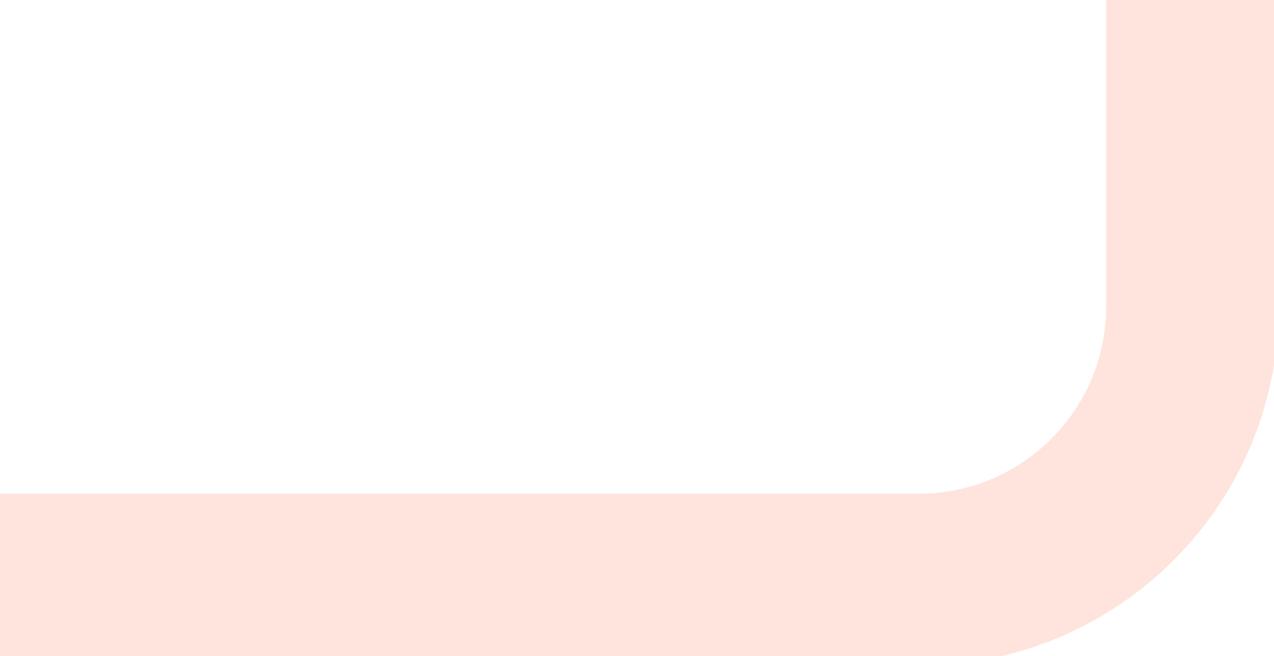


Des centaines de clients modernisent leur exploitation !



Quelques références IBM i, en France

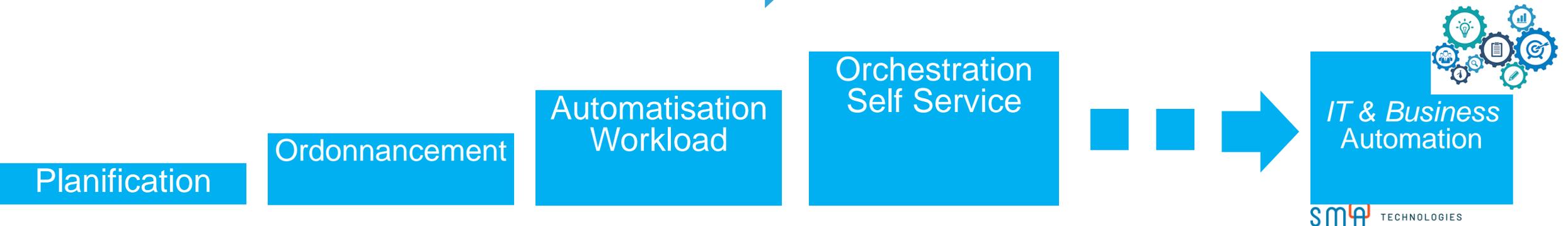
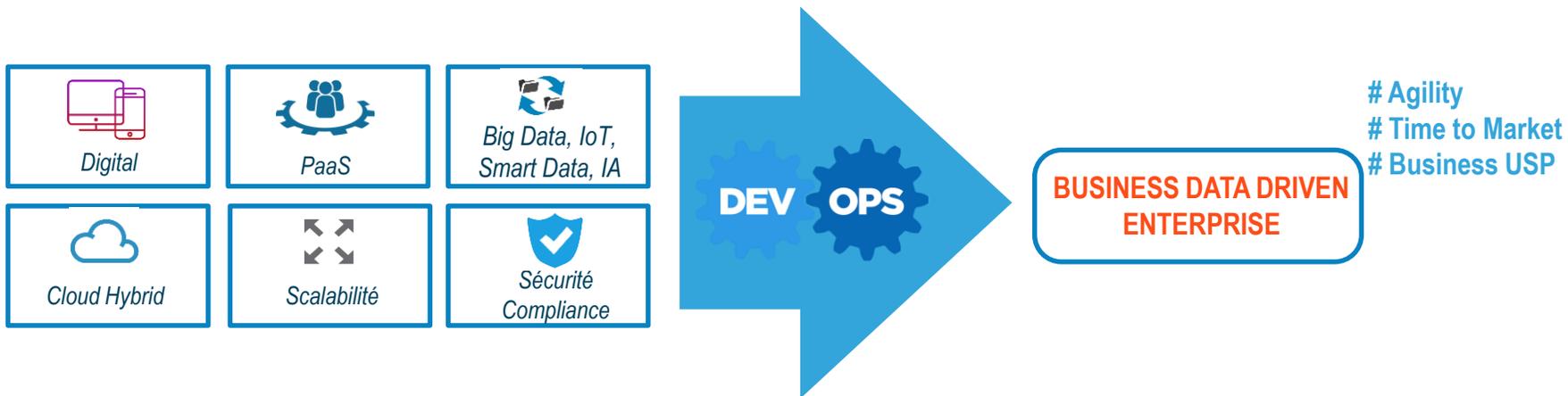




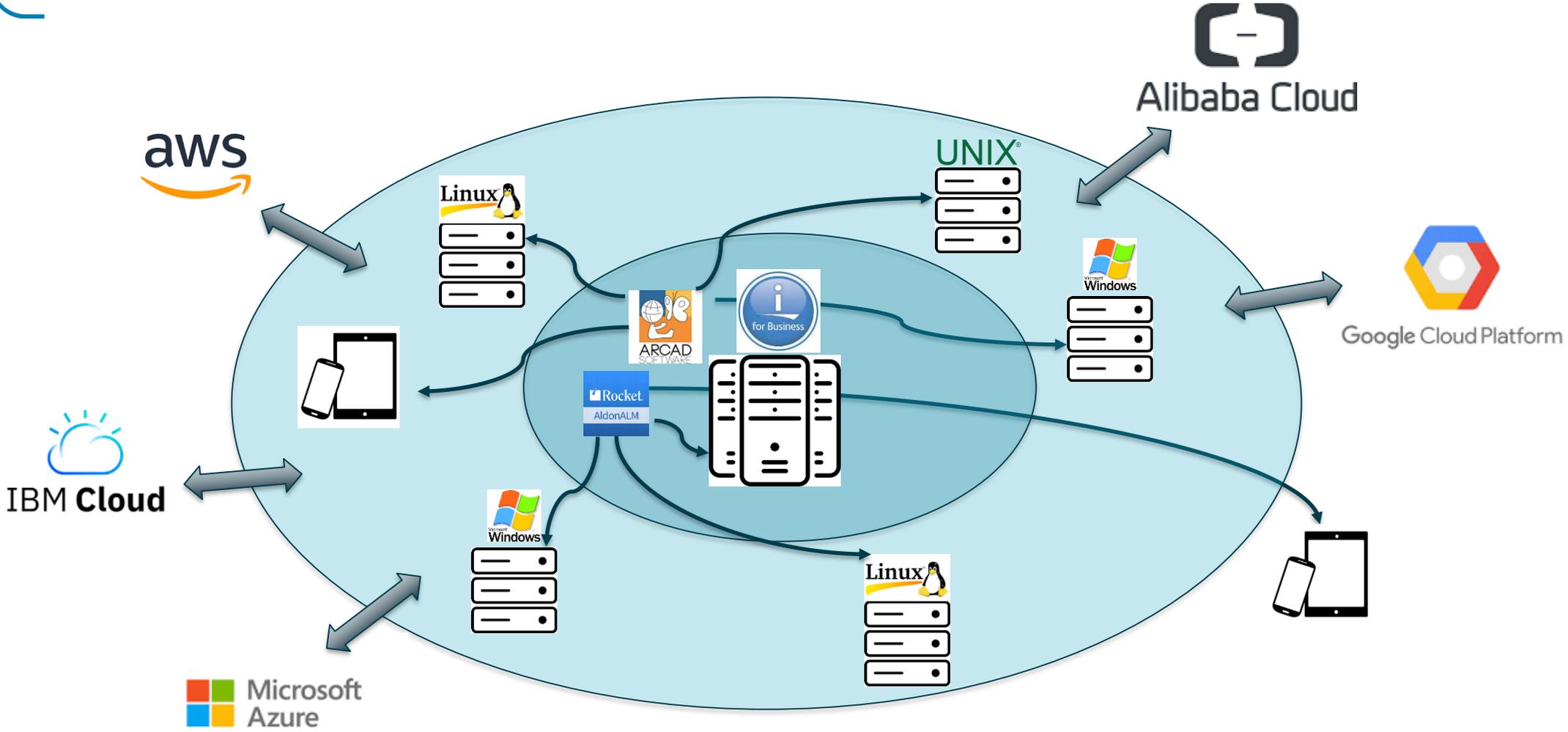
Evolution des besoins d'Automatisation

Challenges de la Modernisation du SI et de l'Exploitation

- L'automatisation est incontournable pour adapter le SI à l'ère Digitale
- L'Exploitation IT doit s'aligner sur les contraintes métiers et clients et être disponible 24h/24 7j/7.
- L'automatisation est la clé pour rendre les métiers agiles et efficaces.



Evolution de l'infrastructure du SI



Challenges de l'Exploitation Informatique

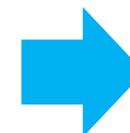
- Aligner l' Exploitation informatique sur les besoins métiers
- Accélérer la **capacité** et la **vitesse des changements**
- Gérer les **architectures hybrides**
- Devenir « **Scalable** »: « Infrastructure As A Code » & « Cloud »
- Être **prédictif** avec **gestion proactive des incidents**
- Améliorer la **sécurité** et gérer la **compliance** (RGPD)

Planification

Ordonnancement

Automatisation
Workload

Orchestration
Self Service



*IT & Business
Automation*

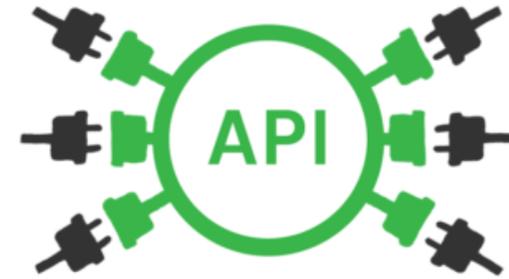


Challenges de la modernisation DevOps

- Organisation
 - Élimination des silos
 - Equipe multidisciplinaires, avec un Leader
 - Itération versus projet.
- Communication
 - Peu ou pas de documentation (Tags).
 - Indicateurs (QoS, SLA, Self Service, ...)
 - + de DASHBOARD, - de REPORTING
- Automatisation
 - IT (Dev & Ops & Sec)
 - Business Services



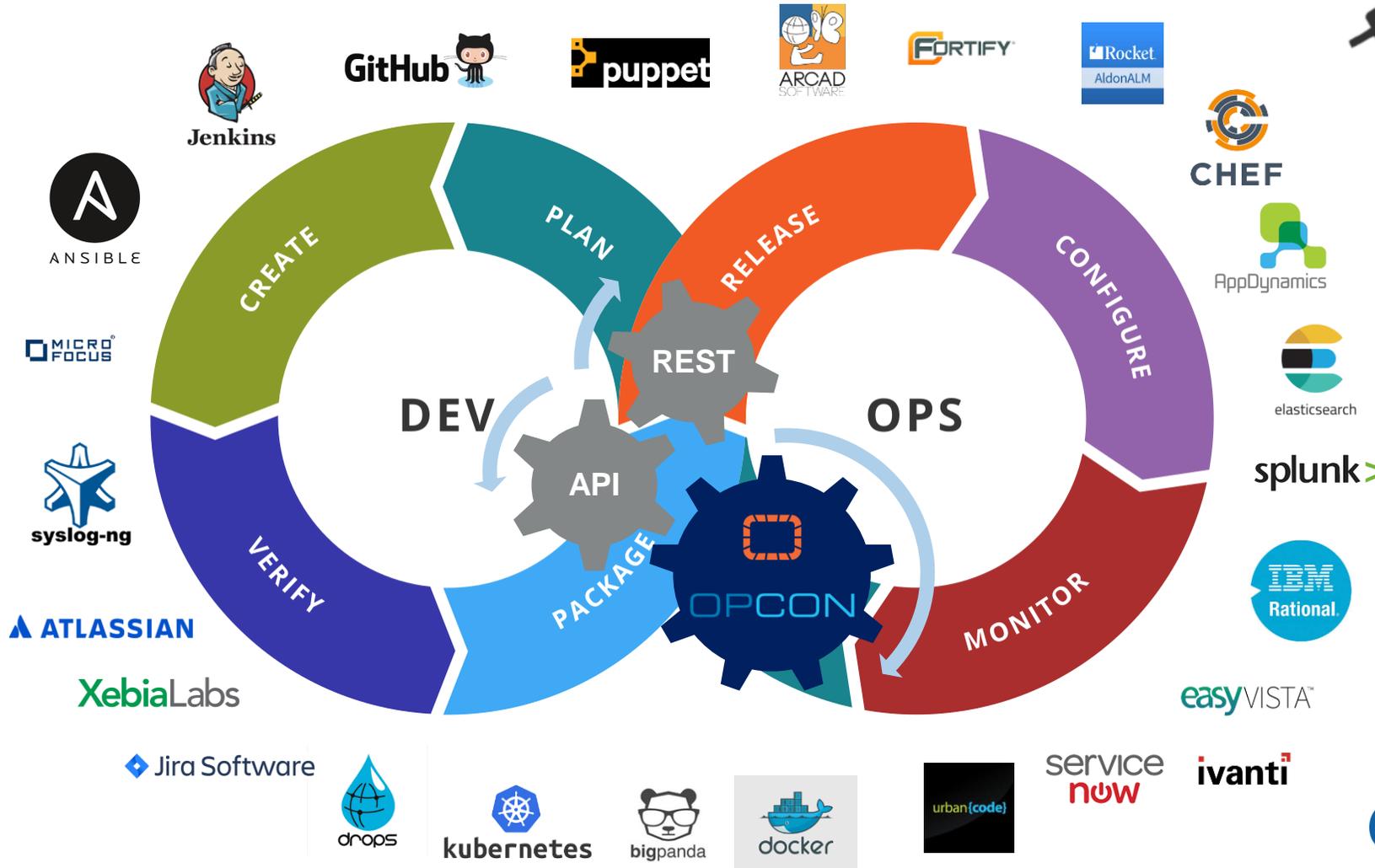
DevOps = OpCon API !



Code
Build
Configure

Test
Analyse
Security

Define
Plan
Security



Release
Deploy
Coordination

Continuous
Configuration
Automation
Coordination

Infrastructure
APM &
Analytics

La plateforme d'automatisation est le cœur de la DevOps Tool Chain pour accélérer les changements

Gartner

sma TECHNOLOGIES

DevOps Automation Tool Chain

Exemple d'une Tool Chain DevOps pour accélérer les changements



Application Change Management

Self Service

- On demand
- Continuous change
- Planned changes



Infrastructure As A code

Infrastructure change and updates



Jenkins



ANSIBLE



Self Service

BUSINESS USERS



Nouveaux scripts & jobs



- Reboot
- Disable Server
- Create server
- Stop jobs

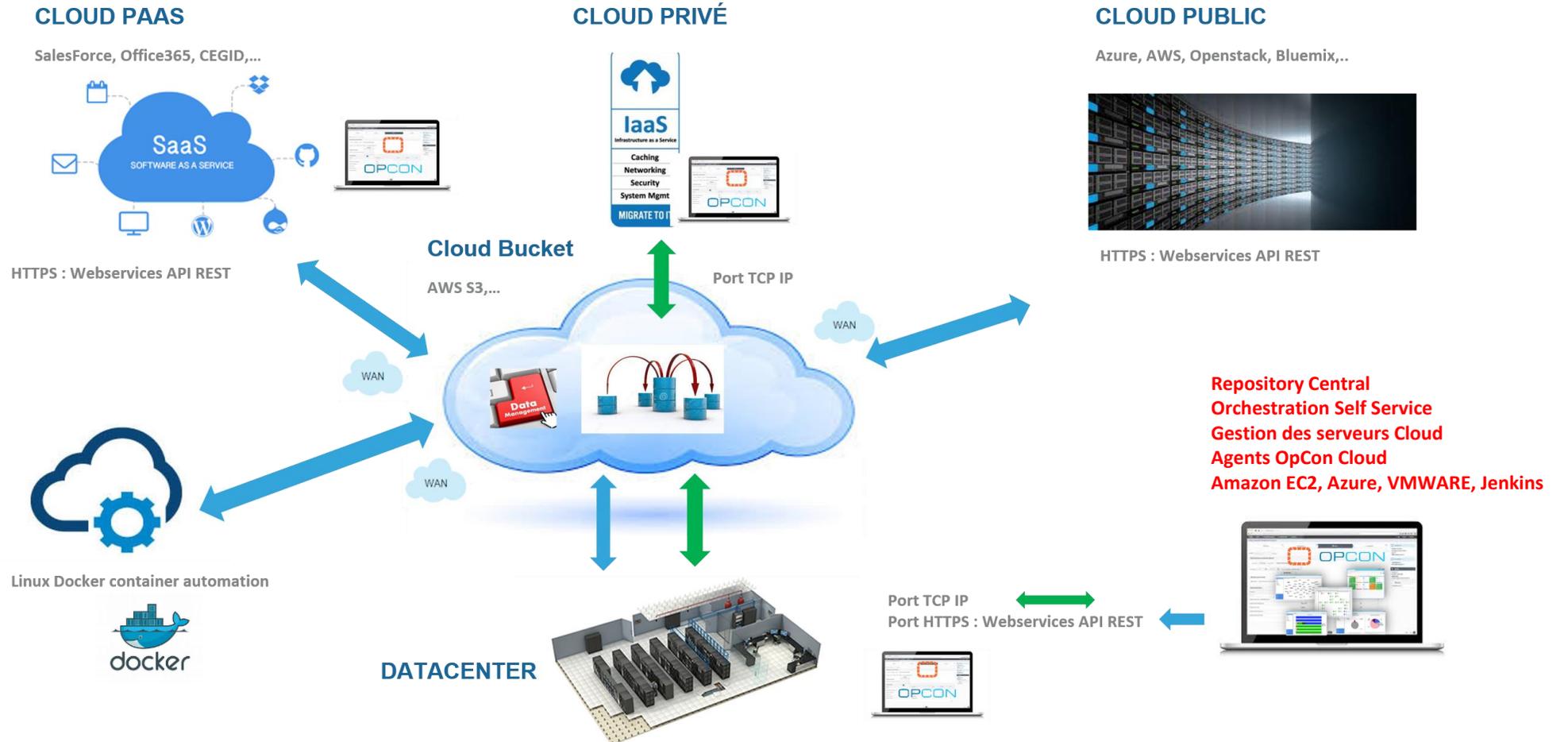
- Application changes
- Application Scripts & jobs changes
- Infrastructure servers changes
- Infrastructure scripts & jobs changes

Challenges de la modernisation

Automatisation architectures hybrides avec OpCon

Cloud Privé
& Public
IaaS
SaaS
PaaS

AWS
MS AZURE
DOCKER
Kubernetes
VMware



Connecteurs Cloud

Interface avec les Cloud Providers

- Gestion d'instances dans le Cloud:
 - Création
 - Démarrage
 - Statut
 - Arrêt
 - Suppression

Définition AWS EC2

User Id: CLOUD SERVICE ACCOUNT

Connector Location: [[AWSEC2Path]]

User ID: demo

Region: EU West (Ireland)

Operation: StartInstance

Create Instance | Get Instance Status By Tag | Start Instance | Stop Instance | Terminate Instance | Failure Criteria

Tag Name: DB SQL

Insert, Update or Remove Instances

Defined Instances
MS SQL SERVER EMEA
SERVER ALTERNATE



IBM Cloud

Connecteur **Webservices Rest**



- Automatisation des nouvelles applications **via leur API**
- Fonctions **GET, POST, PUT, et DELETE**

Définition Web Services (RESTful)

User Id

Job Details | SSL | Failure Criteria

Connector Location

URL

Operation

User Name

User Password

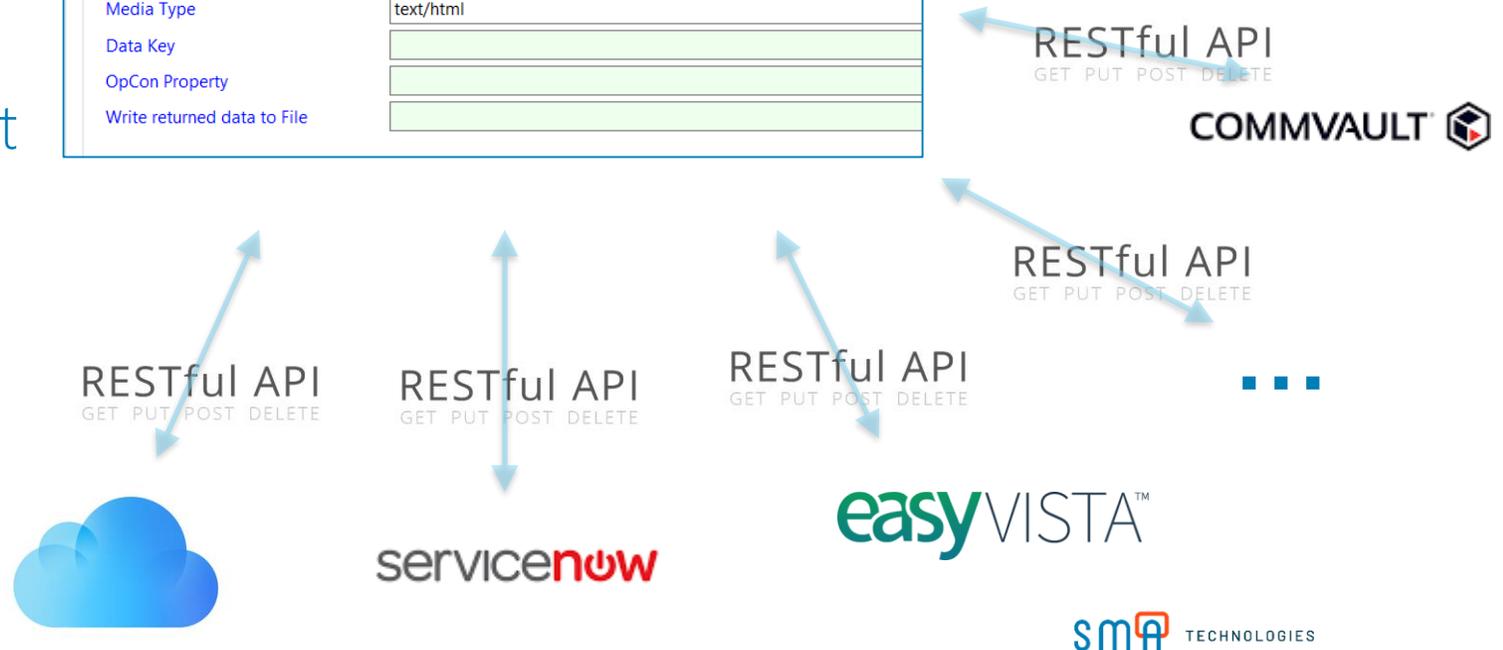
Header Attributes | Query Response (GET) | Message Body (POST/PUT) | Message Body (POST_POLL)

Media Type

Data Key

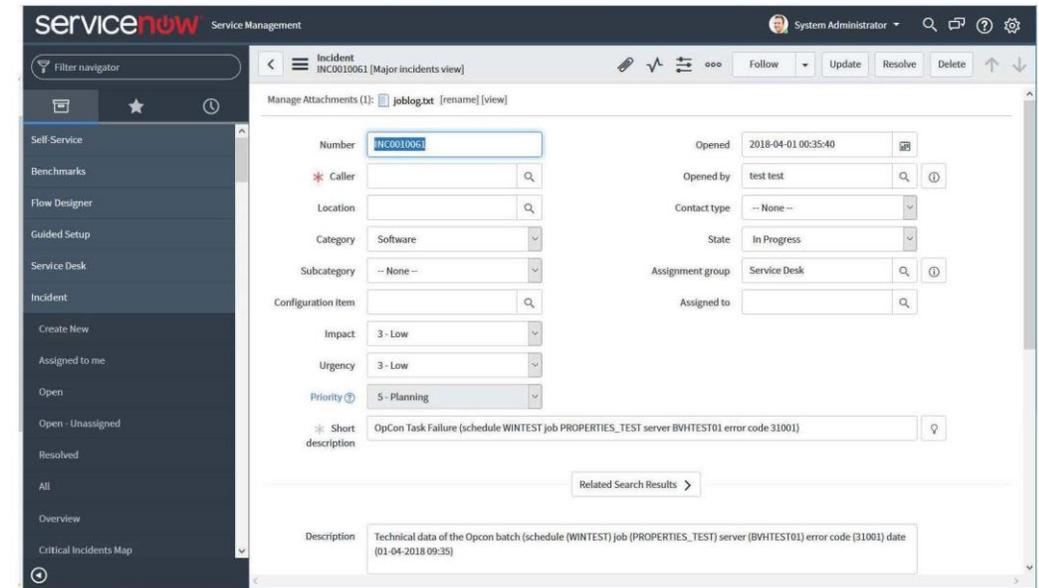
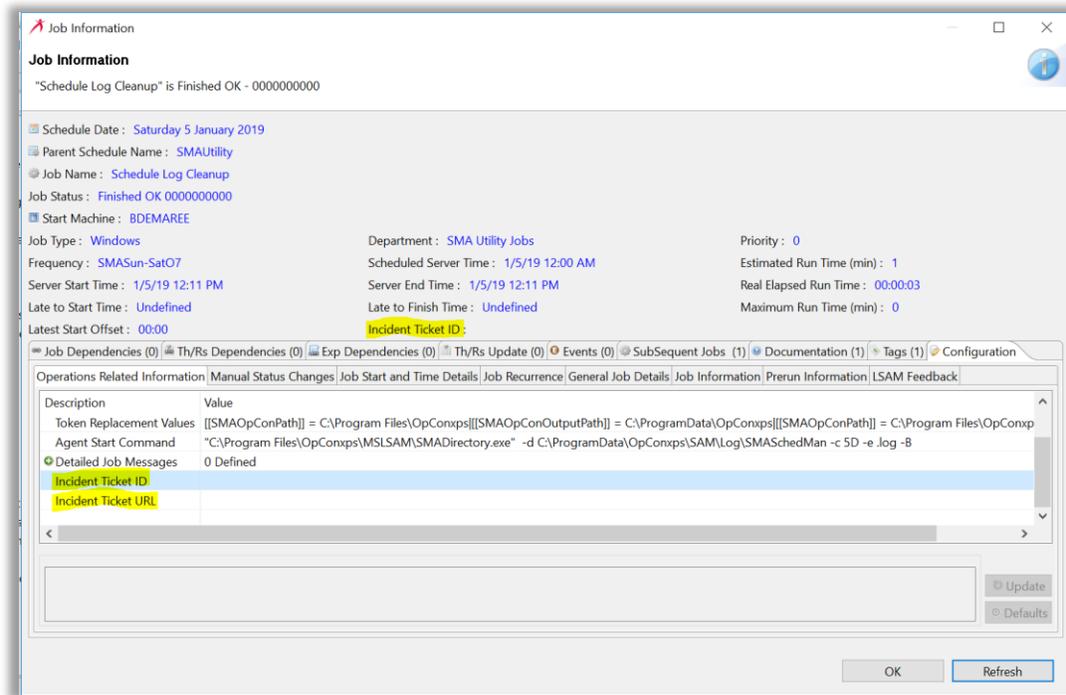
OpCon Property

Write returned data to File

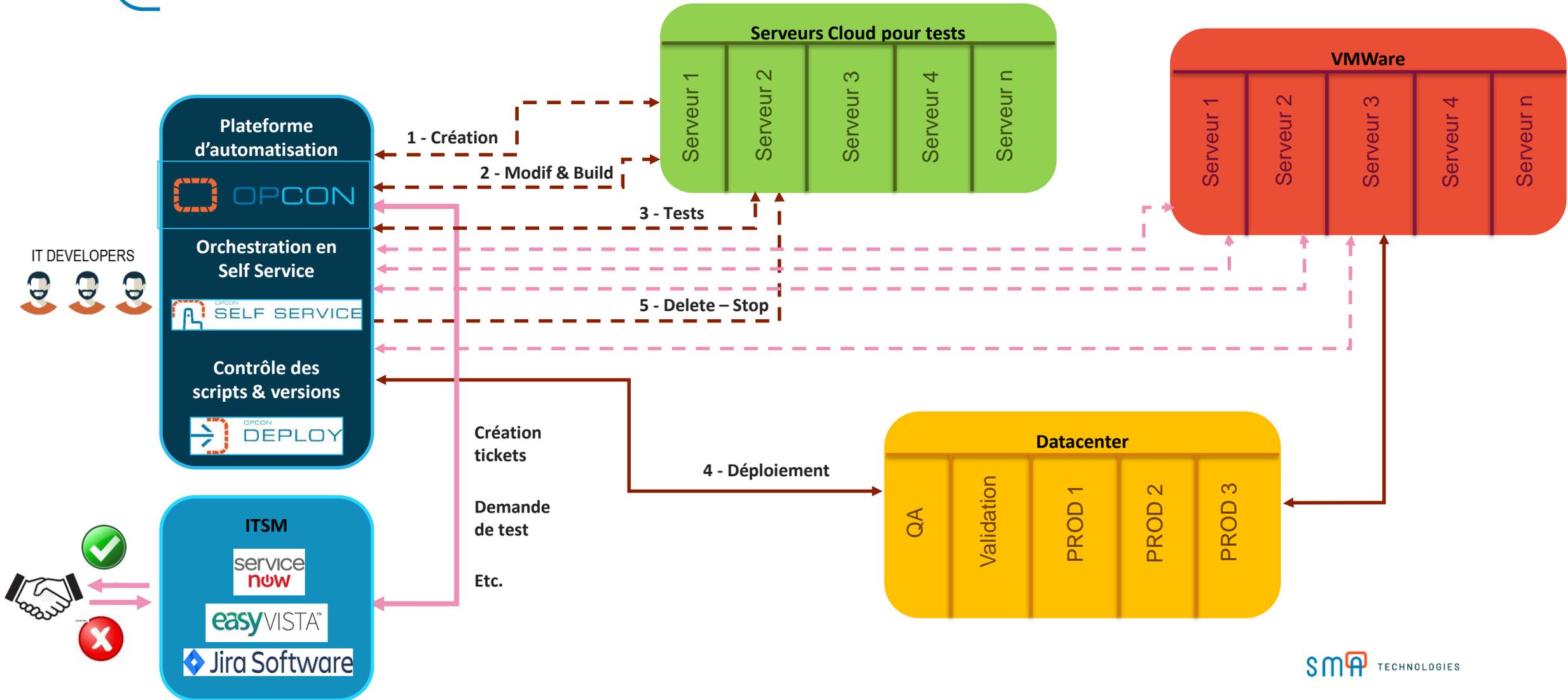


Connecteurs ITSM (Exemple ServiceNow)

- Création et suivi de tickets depuis OpCon



Exemple : Tests d'applications dans le Cloud et changement continu sans intervention humaine



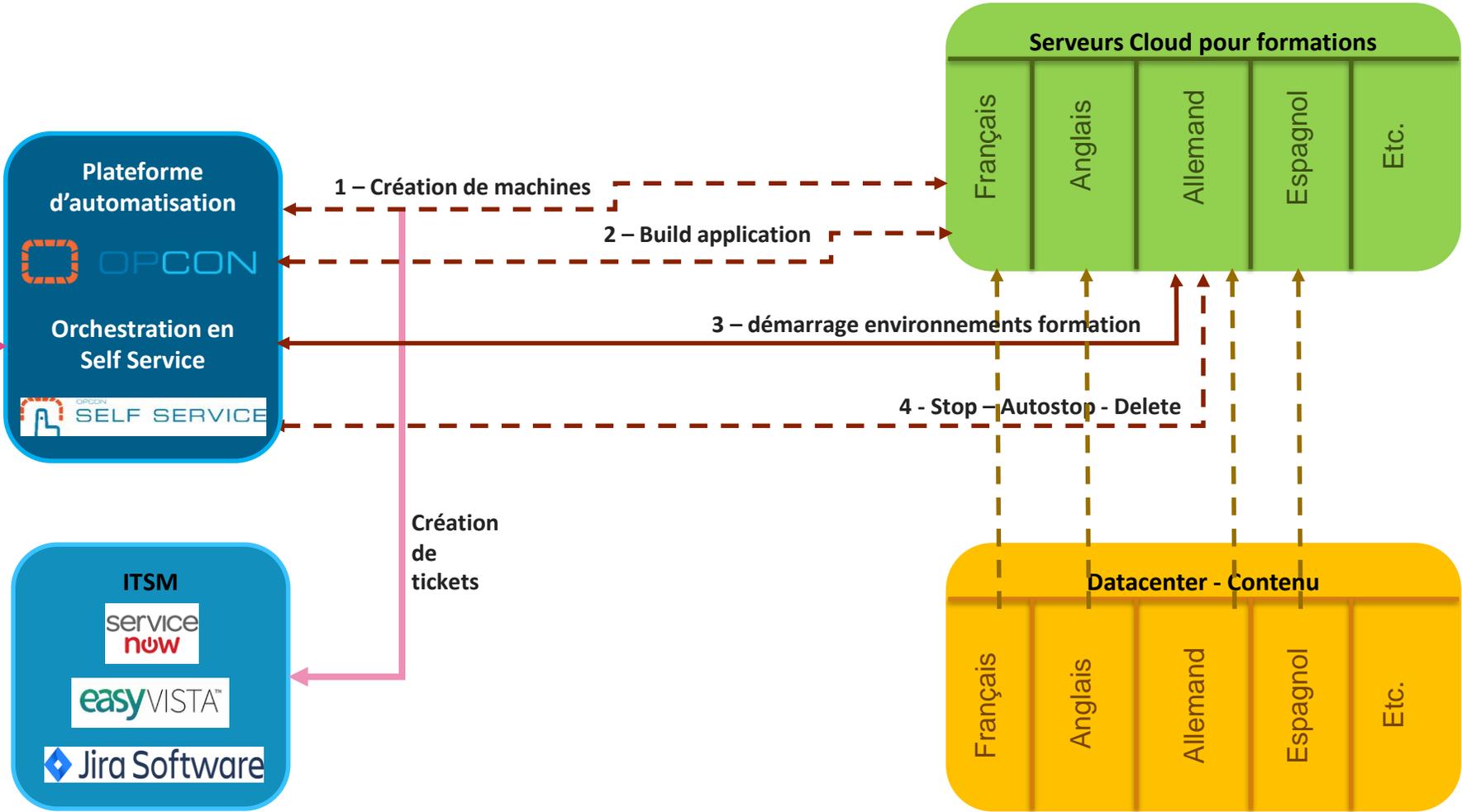
Exemple : environnements de formation sur le Cloud

Formateur



9h - 18h

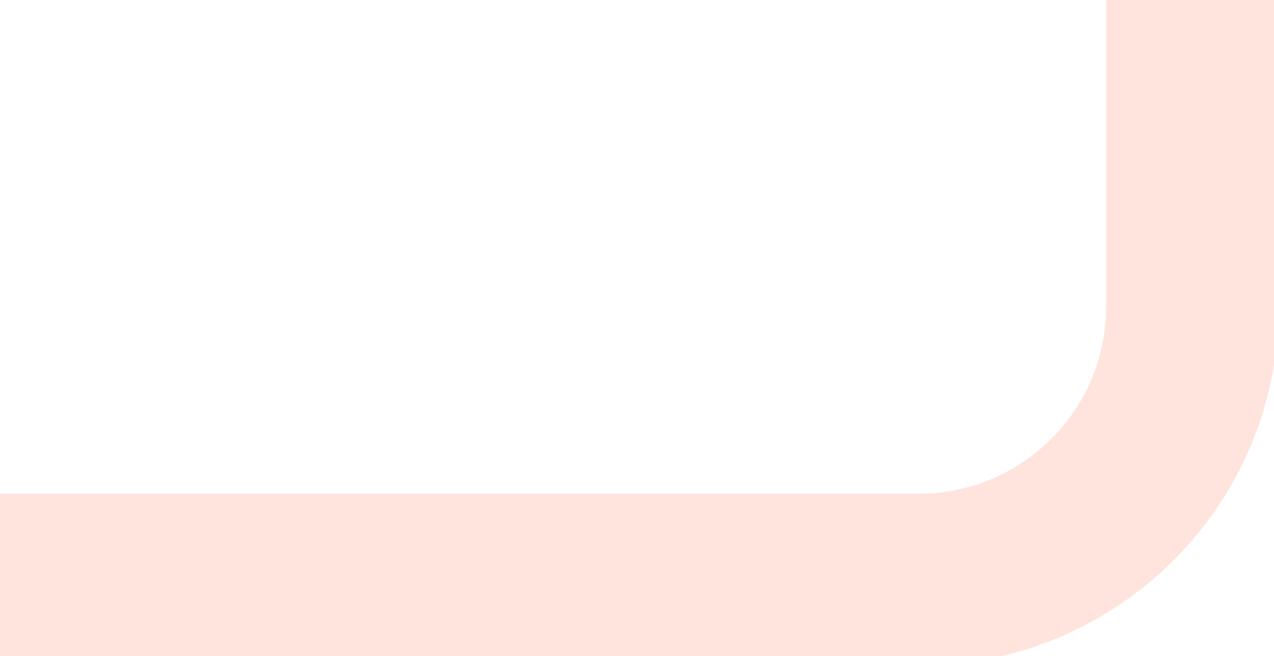
Bouton « Start Formation »



Challenges de la modernisation Sécurité

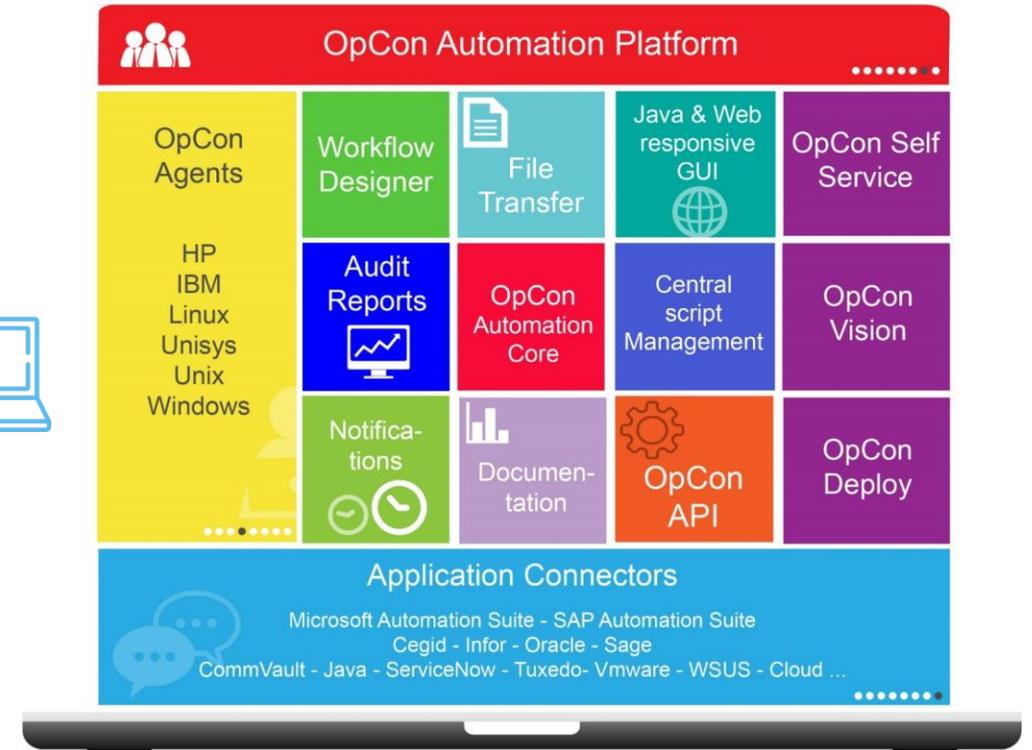
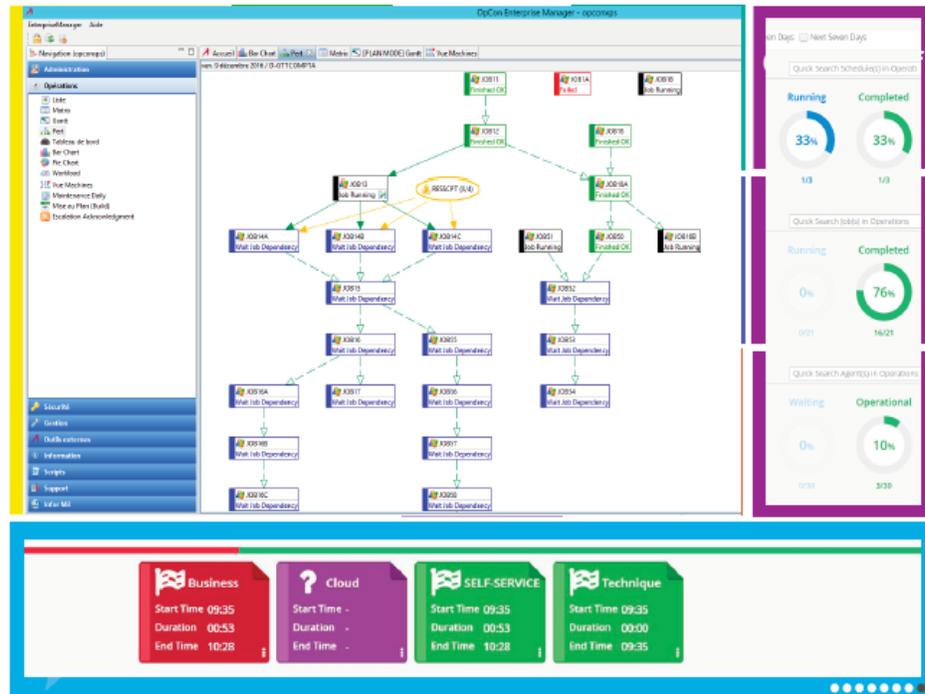


- Sécurité informatique
 - Scripts CENTRALISÉS vs dispersés sur les serveurs
 - Logs CENTRALISÉES vs dispersées sur les serveurs
 - PRA / PCA du SI
- Sécurité des données Métiers
 - REPORTING & DASHBOARD fiables avec des données SÉCURISÉES
 - Accès aux données sensibles PROTÉGÉES
- Compliance
 - CONFORMITÉ ISOXX, SOX,...
 - RGPD



Présentation plateforme d'automatisation OpCon

Plateforme d'automatisation OpCon



Gold Application Development
Silver Data Platform



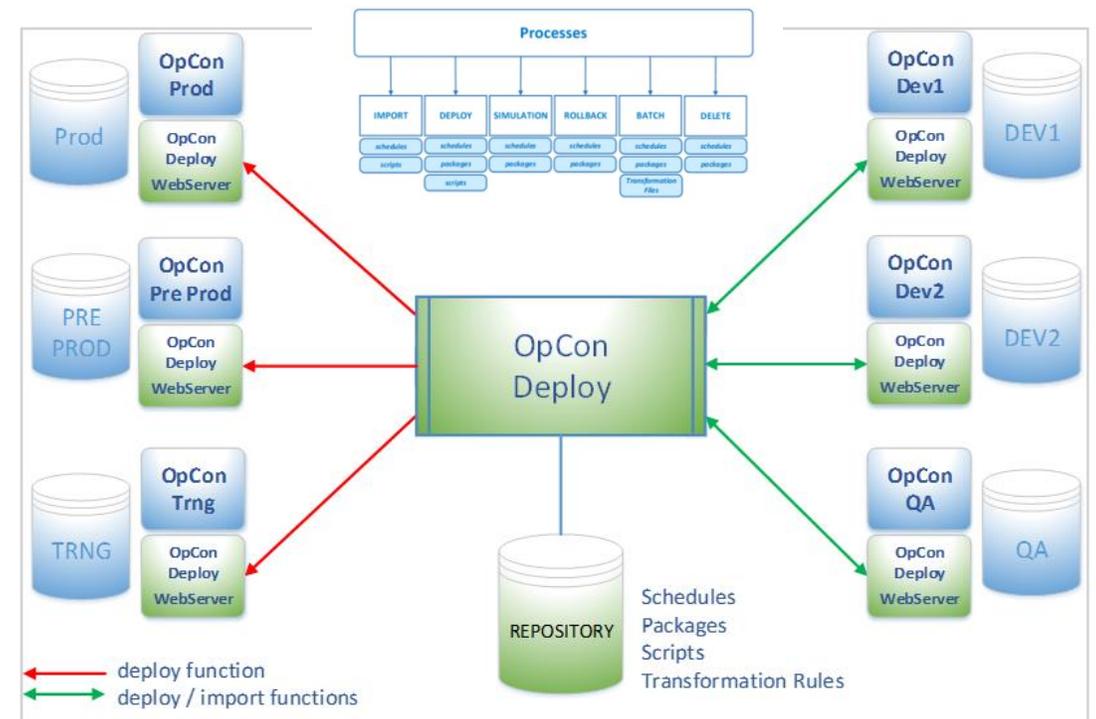


OPCON
DEPLOY

Nouveau !

OpCon Deploy

- **Gestion des changements** de chaînes de traitements, de workflows et de scripts dans les environnements OpCon:
 - OpCon Deploy a sa propre base de données
- Principales fonctionnalités :
 - **Versionning** des packages, workflows et scripts
 - **Règles de transformation** entre environnements
 - Basic (serveur, user,...)
 - Standard (fréquence, dépendances,...)
 - Avancée (modification des lignes de commandes)
 - **Simulation** d'un déploiement
 - **Rollback** d'un déploiement
 - Déploiement en **mode Batch**
 - **Historique** des changements
 - Tous les **changements** sont **audités**





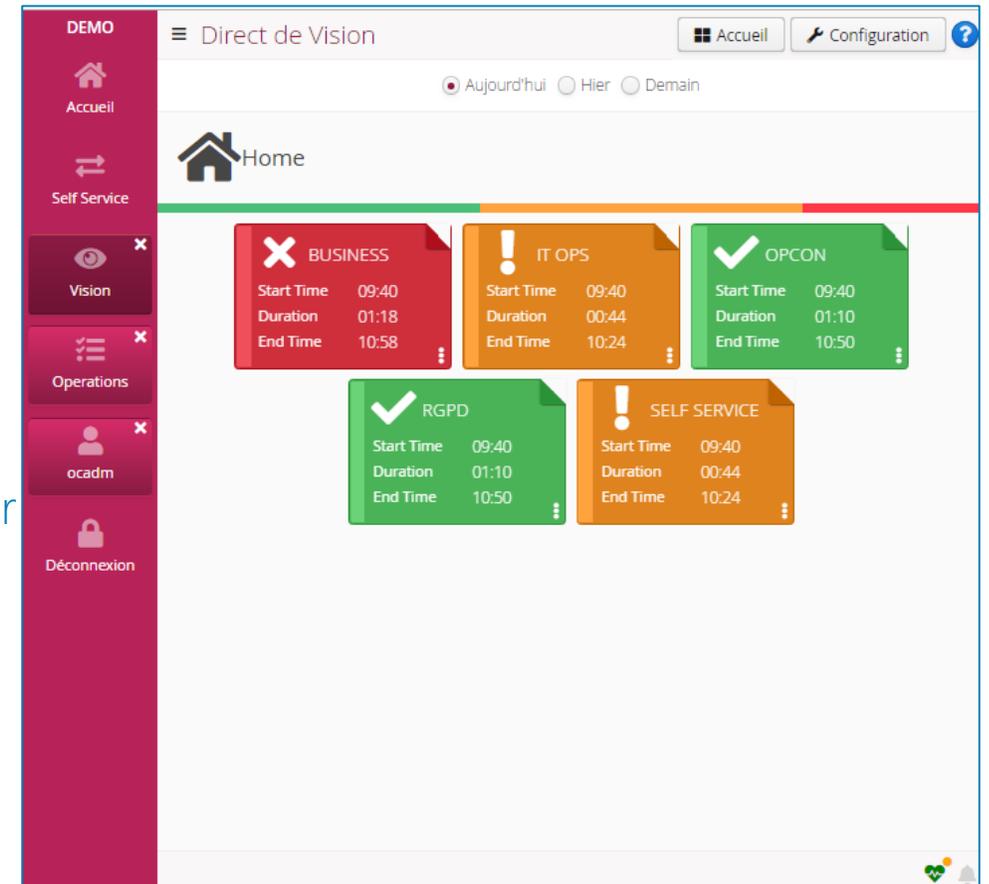
OPCON

VISION

Nouveau !

OpCon Vision

- Challenges:
 - Monitoring des exploitations de plus en plus complexe, avec des temps de plus en plus limités.
 - Gestion du chemin critique est essentielle pour la disponibilité des applications métiers
- Vues Vision:
 - Une console unique sous forme de tableau de bord pour le monitoring global
 - Regroupements des jobs par "Tag", avec plusieurs sous-niveaux possibles
 - Un clic sur la carte permet de visualiser immédiatement les jobs taggés et filtrés, avec interventions possibles sur les jobs:
 - Cancel, hold, skip, restart, force start,...



OpCon Vision

- Exemples d'utilisations et de regroupements:
 - Jobs **critiques**
 - Jobs **techniques**
 - Jobs liés à des **entités** (France, UK,...)
 - Jobs liés à des **métiers** (facturation, logistique,...)
 - Jobs liés à des **environnements** OpCon
 - Jobs liés au **Cloud**
 - Jobs liés à la **RGDP** (traitement BDD permis de conduire, paie,...)
 - ...

The screenshot shows the OpCon Vision dashboard in a browser window. The address bar displays 'localhost/#!vision/live'. The page title is 'Direct de Vision'. The interface includes a navigation menu on the left with options: DEMO, Accueil, Self Service, Vision, Operations, oadm, and Déconnexion. The main content area shows a status for 'Home > BUSINESS' with a red 'X' icon. Below this, there are five job status cards: ACCOUNTING (green, success), CRITIQUES (green, success), HR (green, success), LOGISTIC (red, failure), and PAYROLL (green, success). Each card displays Start Time, Duration, and End Time. The top right corner has 'Suspendue' and user profile icons. The bottom right corner has a notification bell and a heart icon.

Job	Status	Start Time	Duration	End Time
ACCOUNTING	Success	07:09	03:29	10:38
CRITIQUES	Success	07:09	00:46	07:55
HR	Success	07:09	03:41	10:50
LOGISTIC	Failure	07:09	00:19	07:28
PAYROLL	Success	07:09	03:41	10:50

OpCon Vision

- Au dos de chaque carte: Totalisation du nombre total de jobs pour chaque statut de job:

The screenshot displays the OpCon Vision interface. The left sidebar contains navigation options: DEMO, Accueil, Self Service, Vision, Operations, oadm, and Déconnexion. The main content area shows a 'Direct de Vision' header with 'Accueil' and 'Configuration' buttons. Below this, there are radio buttons for 'Aujourd'hui', 'Hier', and 'Demain'. A red 'X' icon is next to 'Home > BUSINESS'. The dashboard features several job cards, each with a checkmark and a title: ACCOUNTING, CRITIQUES, HR, and PAYROLL. Each card lists 'Start Time', 'Duration', and 'End Time'. A tooltip is overlaid on the PAYROLL card, showing a summary of job statuses: En attente (0), En cours (0), Terminé (6), Avertissement (0), and Erreur (1). A hand cursor is pointing at the tooltip.

Statut	Nombre
En attente	0
En cours	0
Terminé	6
Avertissement	0
Erreur	1

OpCon Vision

- Un clic sur une carte permet d'afficher la liste des jobs associés à la carte.
- ... et d'intervenir sur les jobs, de voir le rapport d'exécution et le Pert.

The screenshot shows the SMA OpCon Solution Manager interface. The main area displays a table of jobs with columns for Date, Chemin Schedule, Nom, Heure Dém..., and Durée. A sidebar on the right contains various action buttons for job management.

Date	Chemin Schedule	Nom	Heure Dém...	Durée
2019/05/13	D-LOGISTIC	C1-LOGISTIC-21	10:44	00:01
2019/05/13	D-LOGISTIC	C1-LOGISTIC-22	10:45	00:00
2019/05/13	D-LOGISTIC	C1-LOGISTIC-23	10:45	00:01
2019/05/13	D-LOGISTIC	C1-LOGISTIC-25	10:47	00:01
2019/05/13	D-LOGISTIC	C1-LOGISTIC-26	10:48	00:01
2019/05/13	D-LOGISTIC	C1-LOGISTIC-2A	10:44	00:00

The screenshot shows a 'Rapport d'exécution de job' (Job Execution Report) for job C1-LOGISTIC-2A. It includes the date (2019/05/21), schedule (D-LOGISTIC), and a detailed log of the job's execution, including file paths and system environment details.

The screenshot shows the 'Découverte Progressive' (Progressive Discovery) interface. It displays a dependency diagram of jobs, with C1-LOGISTIC-2A highlighted in red. The diagram shows the relationships between various jobs in the system.

OpCon Vision

- Droits sur les cartes: Affectation des cartes à des rôles OpCon.

The screenshot displays the 'Configuration de Vision' interface. On the left is a navigation sidebar with options: Accueil, Self Service, Vision (highlighted), Operations, oadm, and Déconnexion. The main area shows a tree view with folders like BUSINESS, ACCOUNTING (selected), CRITIQUES, HR, LOGISTIC, PAYROLL, IT OPS, OPCON, RGPD, and SELF SERVICE. A 'Modifier Carte' dialog box is open, showing the following configuration:

- Carte parent: /BUSINESS
- Type: Groupe Tag
- Nom: ACCOUNTING
- Instance: Courante
- Pattern: compta
- Job Offset: Current Frequency Day
- Rôles: Héritage
- Révoqué: ETUDES, Profil-Isa, Profil-Michel
- Accordé: Profil_Comptable, Role_ocadm

OpCon Vision

- Contexte Vision: Adaptation du tableau de bord Vision en fonction du calendrier.

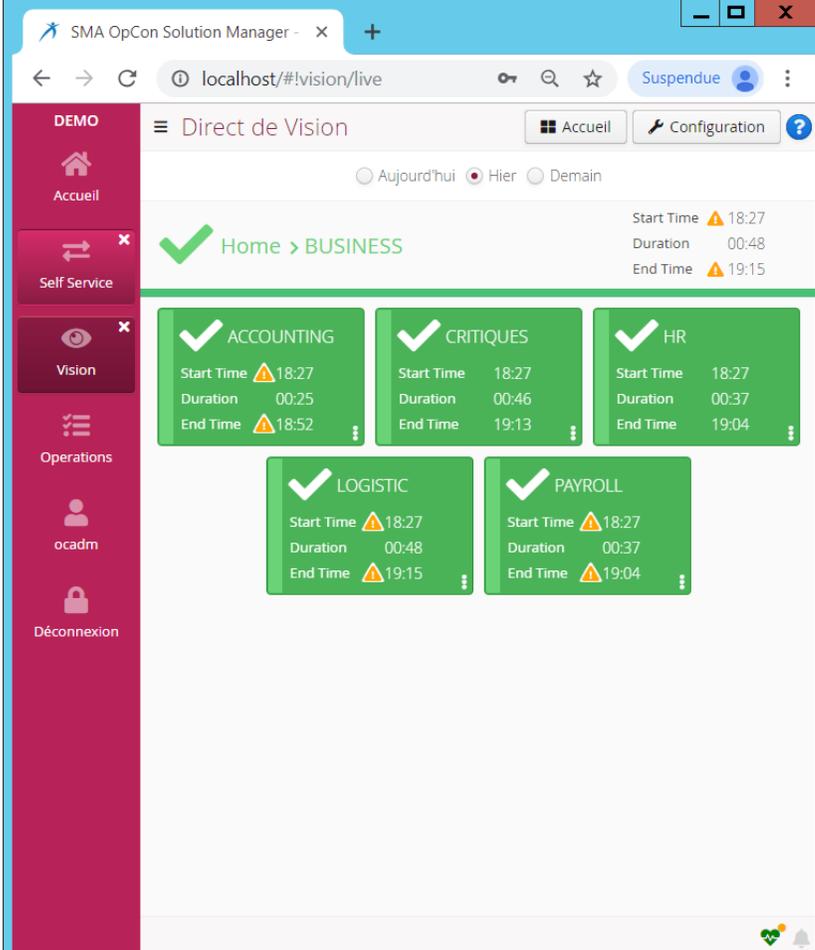
The image displays two overlapping screenshots from the OpCon Vision software interface.

The top-left screenshot shows the 'Vision Settings' dialog box. It features a header with a hamburger menu icon, the text 'Vision Settings', and two buttons: 'Frequencies' (highlighted with a red box) and 'Actions'. Below the header, there is a green plus icon and a folder icon labeled 'IT OPS'. At the bottom, there are 'Save' and 'Cancel' buttons.

The bottom-right screenshot shows the 'Vision Frequency' configuration screen. It includes a 'Name' field containing 'Weekend', a 'Description' text area, and a 'Date Policy' dropdown menu set to 'Include Selected Dates'. Below these fields is a calendar grid with columns for days of the week (Mon-Sun) and months (Jan-Dec). The grid shows 'All' selected for all days. A 'Clear' button is located below the calendar. At the bottom, there are two checkboxes: 'Included Dates' (checked) and 'Excluded Dates' (unchecked). Below the checkboxes are four monthly calendar views for January 2018, February 2018, March 2018, and April 2018, with specific dates highlighted in green to indicate inclusion.

OpCon Vision: Monitoring proactif avec SLAs

- Monitoring en temps réel des processus critiques.
- Suivi des jobs via SLAs
- Rapports & Analyse



The screenshot displays the SMA OpCon Solution Manager interface. The browser address bar shows 'localhost/#!vision/live'. The main dashboard is titled 'Direct de Vision' and includes navigation options for 'Accueil' and 'Configuration'. A sidebar on the left contains menu items: 'Accueil', 'Self Service', 'Vision', 'Operations', 'ocadm', and 'Déconnexion'. The main content area shows a 'Home > BUSINESS' status with a green checkmark. Below this, there are five monitoring cards for different processes: ACCOUNTING, CRITIQUES, HR, LOGISTIC, and PAYROLL. Each card displays a green checkmark, a start time, a duration, and an end time, with a yellow warning triangle next to the end time. The overall interface is clean and professional, with a blue and white color scheme.

Process	Start Time	Duration	End Time
ACCOUNTING	18:27	00:25	18:52
CRITIQUES	18:27	00:46	19:13
HR	18:27	00:37	19:04
LOGISTIC	18:27	00:48	19:15
PAYROLL	18:27	00:37	19:04

OpCon Vision

- Gestion de SLAs (Service Level Agreements)
 - Par contexte
 - Heure de démarrage prévue
 - Heure de fin prévue
 - Jour courant, précédent, suivant, N+..., N-...

Frequency(ies) + Add

Frequency * All Days + Add

SLA

Requirement * Expected Start Time

Time * 21 : 00

Day * Current

OK ✕ Cancel

-5
-4
-3
-2
Previous
Current
Next
+2
+3
+4
+5

OpCon Vision

- Paramétrage d' Actions prédéfinies.

The image shows a screenshot of the OpCon Vision interface. The main window is titled "Vision Settings" and has a tab for "Actions" highlighted with a red box. Below the main window, there are two overlapping dialog boxes for configuring a "Vision Action".

The top dialog box, titled "Vision Action", shows the following configuration:

- Name: Notify Ops Estimated Late to Finish
- Events: A list of events with a plus sign icon and a trash icon.
- Event Template: `$NOTIFY:TEXTMSG,<to>,<message>,[exclude notification id from header]`
- Message: `$NOTIFY:TEXTMSG,[[OpsOnCall]],Please figure out what's slowing down the [[CI.$CARD NAME]] workflow. It's estimated end time is [[CI.$CARD END TIME]],N`
- To: `[[OpsOnCall]]`
- Exclude notification id from header: No (N)

The bottom dialog box, also titled "Vision Action", shows the same configuration as the top dialog box, but with the "Event Template" field expanded to show the full template: `$NOTIFY:TEXTMSG,<to>,<message>,[exclude notification id from header]`. The "Message" field is also expanded to show the full message: `$NOTIFY:TEXTMSG,[[OpsOnCall]],Please figure out what's slowing down the [[CI.$CARD NAME]] workflow. It's estimated end time is [[CI.$CARD END TIME]],N`.

OpCon Vision

- Définition des conditions de déclenchement des Actions.

The screenshot displays a configuration window for defining action triggers. It is divided into two main sections: SLA and Trigger(s).

SLA Section:

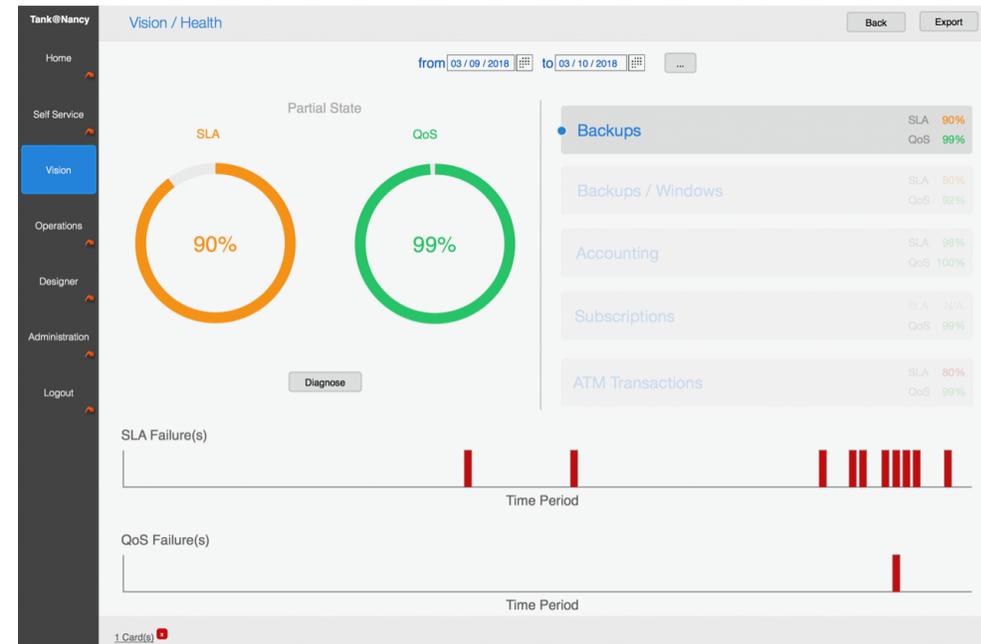
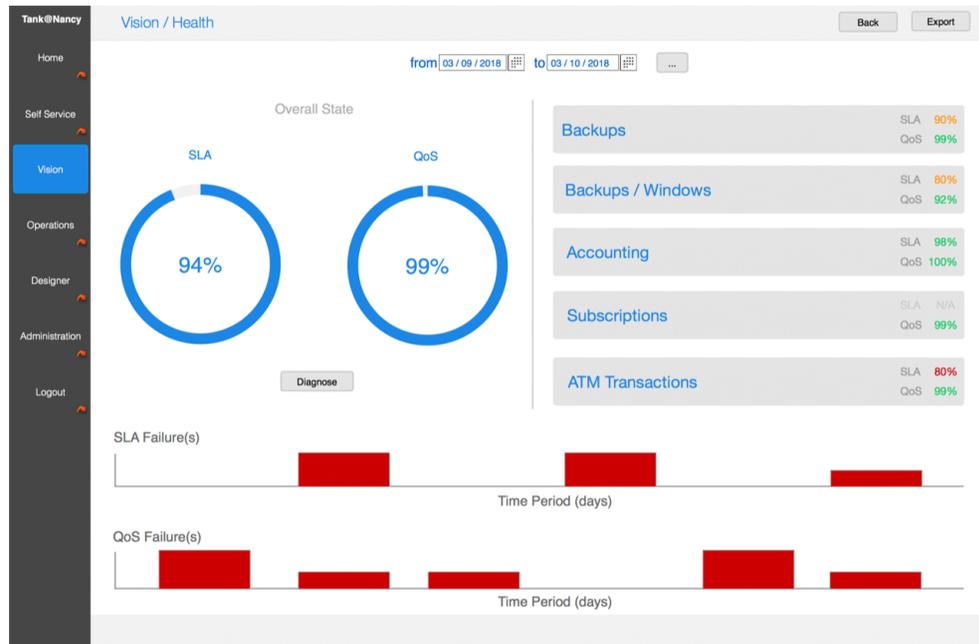
- Frequency ***: A dropdown menu set to "All Days" with a green "+" button to its right.
- Requirement ***: A dropdown menu set to "Expected Start Time".
- Time ***: Two dropdown menus for hours and minutes, set to "21" and "00" respectively.
- Day ***: A dropdown menu set to "Current".
- Buttons: "✓ OK" (blue) and "✗ Cancel" (black).

Trigger(s) Section:

- Status ***: A dropdown menu set to "Failed".
- Runnable(s) ***: A list of options with "Failed" selected and highlighted in blue. Other options include "Partial Failed", "Finished Ok", "Started Late (SLA)", "Finished Late (SLA)", "Estimated Late to Start (SLA)", and "Estimated Late to Finish (SLA)".
- Buttons: "✓ OK" (blue) and "✗ Cancel" (black).

OpCon Vision

- Dashboards & reports en temps réel



The word 'Questions' is centered within a white, rounded rectangular box. The box is set against a larger, rounded yellow rectangle. The background of the slide is a dynamic, abstract composition of orange and red splatters and streaks radiating from the center, set against a light blue gradient at the bottom.

Questions

Merci !

Pour plus d'infos, venez
nous retrouver sur notre
stand pour une
démo personnalisée !