



health

Department:  
Health  
REPUBLIC OF SOUTH AFRICA

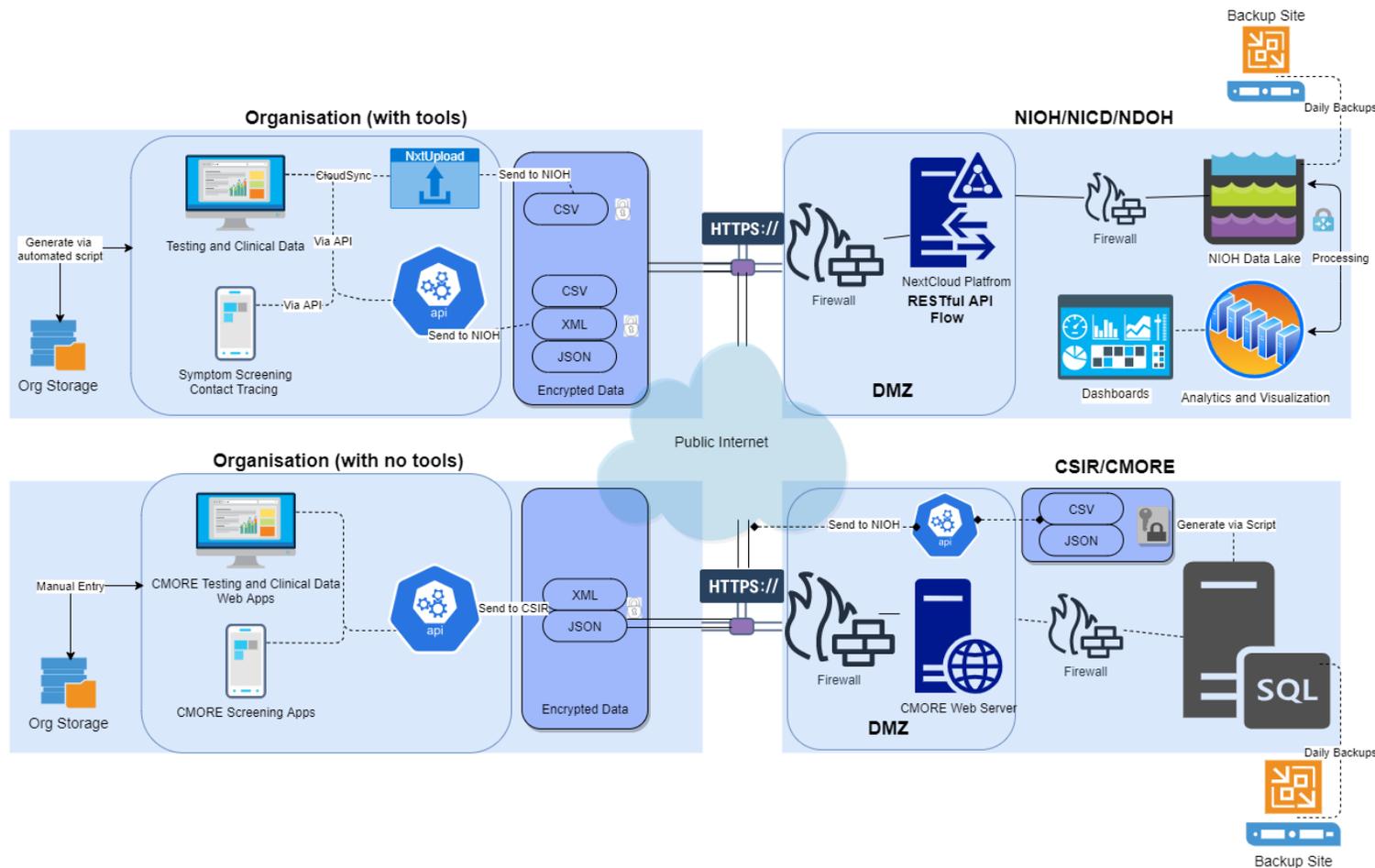
# COVID-19 Occupational Health Surveillance System (OHSS) for South African Workplaces

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11 Feb 2021

**What happens to your Data?**

# High-level Architecture for OHSS



## Organizations with no tools

- ✓ Manual Submissions (Next Cloud)
- ✓ CSIR CMORE

## Organizations with tools

- ✓ API integration
- ✓ Next Cloud integration

## Data Lake

- ✓ Database (SQLServer)
- ✓ Automated Extraction
- ✓ API Integration

## Data Analytics and Visualization

- ✓ Google Studio Dashboards
- ✓ Descriptive Analytics
- ✓ Integration with external data sources

# Occupational Surveillance System Business Registration: Workflow

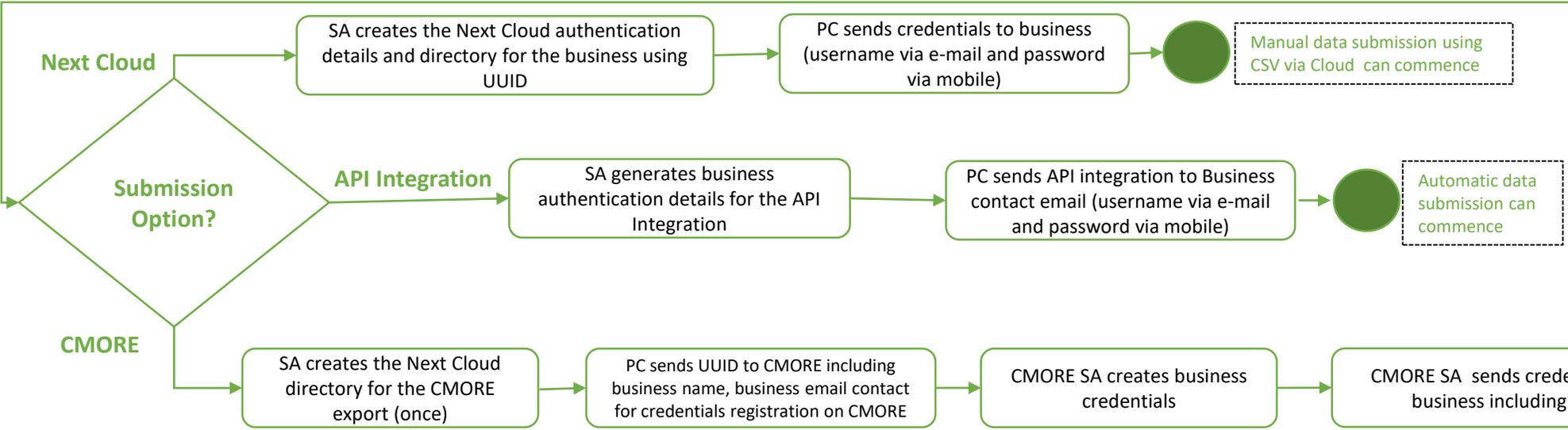
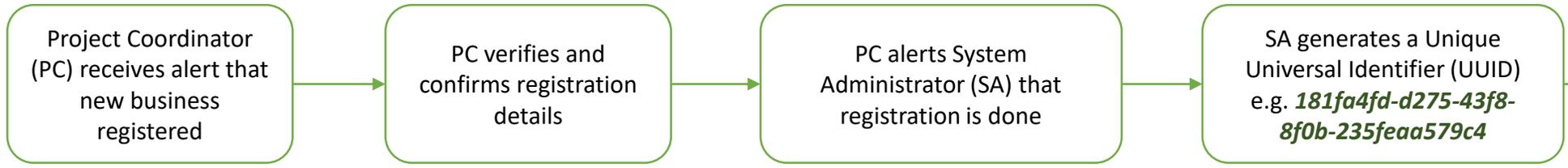
This is a workflow for registering a business for submitting the COVID-19 OHS to NIOH or CMORE (CSIR)

The following details are provided in the portal

- Business name
- Business industry
- Business address**
- Business province**
- Business district**
- Employee numbers
- Female employees
- Male employees
- Business contact
- Contact email
- NDA Signed
- Sector affiliation
- Submission Option:
  - | CSV via Next Cloud
  - | API Integration
  - | CMORE platform submission

Business contact accesses portal to register electronically

<https://ohss.nioh.ac.za>



**Note:**

- Data flow after registration covered by a separate process:
  - Next Cloud to Data Lake
  - CMORE to Next Cloud

# The OHS system consolidates data from various sources and process this data to achieve a set of key outcomes



## Data Sources

- Private sector businesses
- Public sector
- NICD - NMC and sentinel hospital admissions database (DATCOV)
- NHLS laboratory testing data
- Private laboratory testing data
- Compensation Fund
- National Department of Health
- Department of Employment and Labour
- Mining Sector



## Data Sets

- Vulnerability assessment data
- Symptom screening data
- Positive case data
- Return to work data



## Storage & Analytics

- NIOH data lake
- Anonymised



## Outcomes

- Summary of COVID-19 indicators per industry
- Identification of high-risk employees
- Identification of high-risk areas (Geographically)
- Identification of high-risk industries and occupations
- Identification or probability of work-related outbreaks

**Thank You**

Email: [OHSworkplace@nioh.ac.za](mailto:OHSworkplace@nioh.ac.za)

Web Portal: <https://ohss.nioh.ac.za>