



SMS Innovation Services Content

October 2016

SMS Innovation Services : High Level

What?	Features	Upgrade & Extensions	Available today
Collaborative workspaces	<ul style="list-style-type: none"> • Per project • SFTP upload • Scalable storage (Isilon) • Parallel Database (Greenplum) • Web console (incl. R, SQL interface) • Virtual Desktop Service (Linux or Windows, bring your own tools) • Audit reporting & activity tracking • Role-based access • Multi-tenanted, monthly subscription model 	<p>Yes</p> <ul style="list-style-type: none"> • Compute and Storage Service options • Virtual Desktop Service options • De-identification Service • Data Library Service • Ontology Service • Healthcare Landing Zone • Electronic data Capture (eDC) Service 	Yes
De-identification Service	<ul style="list-style-type: none"> • Role-based access; managed in-house by the data owner • Simple command line interface • Client/server model • Secure – https protocol used • Comprehensive audit logging • High or low volume CSV and XML file processing • 14 core anonymisation plug-ins with create your own options 	<p>Yes</p> <ul style="list-style-type: none"> • Standalone service or available as part of the Healthcare Landing Zone 	Yes

		Extension	e today
<ul style="list-style-type: none"> Data Library Service 	<ul style="list-style-type: none"> Web-based secure service Field level information on national and international standards data elements Pre-populated with exemplar datasets across multiple domains Project-specific datasets can be uploaded, maintained and version tracked Template-driven with version tracking Turn dataset definitions into snippets (SQL, XML schemas etc.) RESTful API provided for programmatic use Monthly consumption based model 	Yes <ul style="list-style-type: none"> Standalone service or available as part of the Healthcare Landing Zone 	Yes
<ul style="list-style-type: none"> Ontology Service 	<ul style="list-style-type: none"> Web-based and API level access Regularly updated reference website provides lookups to controlled vocabularies Support for multiple vocabularies and ontologies Encoding agnostic – support for SNOMED-CT, HPO, ICD etc Use within ETL flows, application drop downs, python, R, SQL Fast search across all terminologies and ontology sources Filter for a single ontology (including specific legacy versions) Monthly consumption based model 	Yes <ul style="list-style-type: none"> Standalone service or available as part of the Healthcare Landing Zone 	Yes
Electronic Data Capture (eDC) Service	<ul style="list-style-type: none"> Web-based secure service User friendly, intuitive self-service eCRF and eForm construction Patient surveys via e-mail 	Yes <ul style="list-style-type: none"> Consultancy Support Services 	Yes

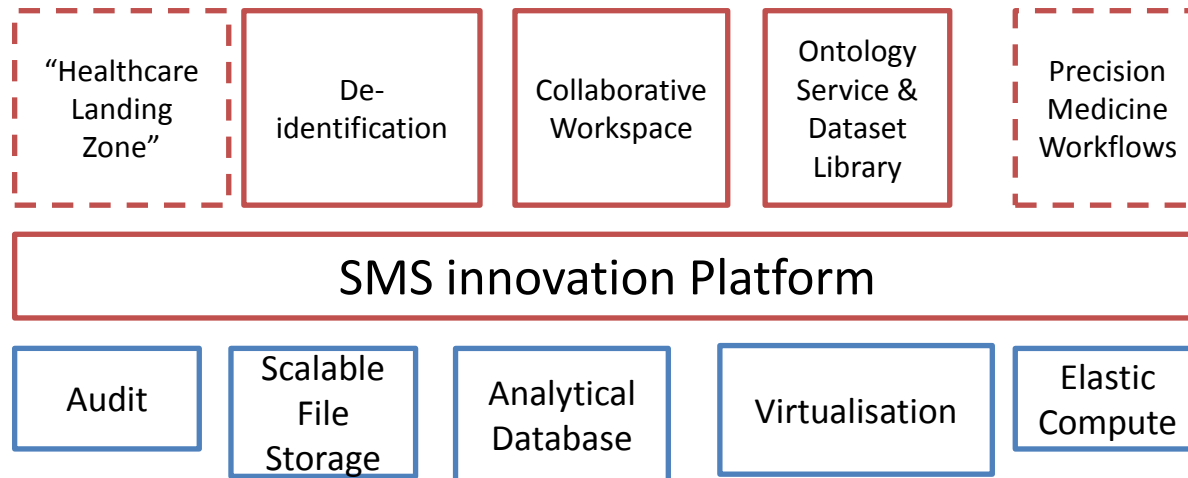
• What?	• Features	Upgrade & Extension	Available today
Healthcare Landing Zone - data flows	<ul style="list-style-type: none"> • Data exchange with NHS Scotland Health Boards and Data Safe Havens • N3/SWAN connection • De-identification Service, data linkage and data staging • Data selection API • Healthcare analytics schema and table mapping • Direct to file store • Consumption based model 	Yes <ul style="list-style-type: none"> • Dataset Library • Ontology Service • Data Quality Reports • Data Linkage Reports • Consultancy Support Services 	Q4 2016
Healthcare Landing Zone – app hosting	<ul style="list-style-type: none"> • N3/SWAN connection • Application hosting (VMWare) • Order/comms • Consumption based model 	Yes <ul style="list-style-type: none"> • Hosting options 	Q2 2017
Workflow for Precision Medicine – Research & Development	<ul style="list-style-type: none"> • Core workflow engine – ‘life-cycle containers’ to create your own develop and test environment • Image management • Clinical data API • Integration with NGS provider • Content services • Access to data repository & APIs • Consumption based model 	Yes <ul style="list-style-type: none"> • Compute, sizing and storage options • Number and configuration of ‘containers’ 	Q2 2017

• What?	• Features	Upgrade & Extension	Available today
Workflow for Precision Medicine - Delivery	<ul style="list-style-type: none"> Managed translation from R&D Segregated run-time environment Auditability, traceability and reproducibility Order/comms Per patient, transaction based commercial model 	Yes <ul style="list-style-type: none"> Compute, sizing and storage options 	Q2 2017
Workflow for Precision Medicine – Multi-centre Studies	<ul style="list-style-type: none"> Multi-site deployment Federated data management and analysis 	Yes <ul style="list-style-type: none"> Compute, sizing and storage options 	Q2 2017
Consultancy Support Services	<ul style="list-style-type: none"> Training and enablement Project and Programme Management 	Yes <ul style="list-style-type: none"> Consultancy daily rates 	Yes
Next Generation Sequencing Services	End-to-end delivery of NGS.	Yes	YES
Hosting and Data Management Services	<p>The hosting platform at SMS-IC is available with either Internet Facing Hosting which is the traditional form of web hosting and is provisioned from SMS-IC Datacentre 1 in Glasgow or it can be hosted via the SWAN network to allow communication exchange across the Scottish Public Sector from SMS-IC Datacentre 3 in Edinburgh. Our Dedicated Server solution enables the managed hosting of physical and virtual servers, dedicated to your business for ultimate separation and security.</p>	YES	YES

SMS Innovation Services and Roadmap

Roadmap Goals

- Broaden the appeal of core workspace services to increase scale of adoption
- Extend the platform to integrate with clinical setting (Precision Medicine and “healthcare landing zone”)



The SMS Platform for Innovation Supports All of These Potential Opportunities

