

Historion Program Overview

The Historion Program Overview is provided to explain what the Historion product is and what its various features assist the Radiation Safety Officer to do in their role. The Program Overview is separated into logical sections which follow the layout of the software. Further: the Radiation Safety Functions listed in the table below are each Historion Training module chapters and objectives:

Section	Radiation Safety Function or Context
Dosimetry	Efficient Management and Analysis of Radiation Exposure Records
Wearers	Management of Occupational Exposure and Compliance for Individuals
Centres	Management of Radiation Safety outcomes by Organisational Unit
Protective Devices	Radiation Shielding, Regulatory and Standards Compliance, Audit Preparation
Regulated Devices and Materials	Maintenance, Servicing, Test Records, Fault Diagnosis and Documentation
Training	Radiation Safety Awareness, Courses and Training Levels
Licenses	Radiation Management Licence Administration, Compliance Certification
Tools	Participation in the Commonwealth National Radiation Dose Register
Reports	Radiation Exposure Occupational/Industry Comparisons, Checks and Research
Admin	Critical checks and Balances, Alert Thresholds and Dosimetry Applications
Help	Feature Innovation, Licensing and Responsive Support Assistance

Program Overview

The Historion Program Overview is also available for download as a separately numbered PDF format document. This is very useful for forwarding to management or other interested parties requesting information from the RSO as to exactly what Historion "does" for the organisation.

A Future Features section of the online Program Overview is included, which details new Historion modules and components currently being designed or already undergoing development.

The Program Overview is intended to provide a lay summary of Historion's current and upcoming features and is worded accordingly. The Program Overview is regularly updated and is provided as a separate self-contained pdf document at the following URL:

https://www.historion.com.au/support/documentation/HistorionProgramOverview.pdf



Dosimetry

Historion's Radiation Safety Purpose for Dosimetry is the Efficient Records Management and Analysis of Radiation Exposure Records (data). The following functions are covered;

Exposure Data	Radiation Safety Function or Context
Import	 ✓ Import individual Radiation Dose Reports files to local secure database ✓ Bulk import multiple Dose Reports files from selected folders ✓ Convert different Dose Report data from varying providers to one structure
Transfer	 ✓ Transfer readings online from Landauer's Historion Data Transfer Service ✓ Automatically detect and add new Wearers with bulk Transfer Process ✓ Check for readings breaching regulatory thresholds and custom set limits
Imported	 ✓ Store exposure reports in original format and as transacted data readings ✓ Examine Dose Exceptions and coded Provider Notifications for badges ✓ Reclassify and clarify designated readings with assigned Dose Applications
Readings	 ✓ Fast find and filter exposure readings by Age Range, Sex and Occupation ✓ Fast find and filter exposure readings by Energy Type, and Result Range ✓ Fast find and filter exposure readings by Provider and Organisational Unit

Dosimetry Data Features

Notifications	Radiation Safety Function or Context
Custom	 ✓ Auto-interrogate incoming data for triggers by occupation, centre or wearer ✓ Assign multiple reading field checking levels and criteria combinations ✓ Automatically email one or more recipients with customisable alert notices
Alerts	 ✓ Set regulatory notification levels for exposure reports by centre/occupation ✓ Set custom (RSO) alert levels for exposure reporting by centre/occupation ✓ Detect problem aggregate exposure levels as or before they start to arise

Notification Features



Data Quality Radiation Safety Function or Context Auto-detect missing radiation exposure Dose Readings, gaps in records Account for missing exposure readings, assign reasons, analyse causes Record response and follow up actions for addressing incomplete records Auto-detect duplicate radiation exposure readings, double-ups in record Account for/isolate duplicated readings, assign reasons, analyse causes Record response and follow up actions for addressing duplicate readings Auto-detect overlapping exposure readings, multi-badge dose outcomes Account for/isolate overlapping readings, assign radiation Dose Applications Record response and follow up actions for addressing overlapping readings

Data Quality Management Features

Monitors	Radiation Safety Function or Context
Badge History	 ✓ Retain wearer-badge historical association ✓ Detect provider errors or badge duplication ✓ Assign monitor asset details, notes, status and retire badges
Badge Notes	 ✓ Add badge notes ✓ Automatically align data when readings are imported ✓ Add outlying reading explanations and analysis

Monitor Data Features



Wearers

Historion's Radiation Safety Purpose for Wearers is the Management of Occupational Exposure and Compliance for Individuals. The following functions are covered;

Wearers	Radiation Safety Function or Context
Import Wearers	 ✓ Bulk import Wearer Data for managing Wearer details and demographics ✓ Bulk import National Dose Register Classification and Compliance data ✓ Bulk import Wearer Radiation Usage Licence Files for ongoing management
Merge/Split	 ✓ Unite Wearer records incorrectly split by Providers at name change events ✓ Detect Wearers with multiple records subtle name differences, fuzzy search ✓ Split incorrectly joined Wearer legacy records merged by Provider naming
Expire	 ✓ Manage Wearer currency set Not Monitored based on time-based inactivity ✓ Manage Centre currency set Inactive based on Wearer record inactivity ✓ Reinstate Centres/Wearers for discretional deactivation post data migration
Wearers	 ✓ Fast find and filter Wearers by data Status, Age Range, Sex and Occupation ✓ Fast find and filter Wearers by Pregnancy Status, Site Location and Centre ✓ Fast find and filter Wearers by Licence Status, National Register Readiness

Wearer Features

File Notes	Radiation Safety Function or Context
Ø Files	 ✓ Manage document attachments for all Wearers in one central location ✓ Import document attachments, emails, pdf files, scanned items ✓ Classify, sort find and view document attachments, letters, reports
Notes	 ✓ Manage and File Notes for all Wearers in once central location ✓ Associate documents, emails, attachments, scanned items with File Notes ✓ Sort/Report Noted Activity by Type, Priority, Theme, Time Use, Cost Centre

Wearer Files and Documents



Wearer Licence	Radiation Safety Function or Context
Licenses	 ✓ Wearer licences ✓ Conditions ✓ Supervisory, trainee hierarchy
Expiring	 ✓ Upcoming licence expiry ✓ Track full licence history, single or bulk import licence files ✓ Track licence exemptions

Wearer Files and Documents



Centres

Historion's Radiation Safety Purpose for Centres is the Management of Radiation Safety outcomes by Organisational Unit. The following functions are covered;

Centres	Radiation Safety Function or Context
Centres	 ✓ Maintain Primary and Alternate Radiation Safety Contacts by Centre ✓ Customize Centre setup by Campus, Provider and Cost/Account details ✓ Identify/Analyse Centre Alerts, Centre-based Reporting and Wearer admin

Centres

Future Historion versions will focus further on subordinate centre administration and coordination tasks and capabilities. Several new tabs and convenience features are underway for Centres.



Protective Devices

Historion's Radiation Safety Purpose for Protective Devices is Radiation Shielding, Regulatory and Standards Compliance and Audit Preparation. The following functions are covered for Protective Devices collectively, across the different Protective Device types;

Wearers Radiation Safety Function or Context Support regulatory and standards compliance and audit preparation ✓ Register and analyse Protective Device Models; use, issues, compliance Evewear ✓ Register and track Protective Devices; details, condition, location ✓ Record detailed Model specifications, design, materials, types, documents ✓ Establish Protective Device Model-specific test regime and responsibilities Handwear ✓ Establish Protect Device Model testing methodology and test plans ✓ Conduct AS4543 compliance checks; Model Safety Assessments ✓ Assess and record typical use assumptions and procedures applicable Shields ✓ Analyse and evaluate radiation exposure potential across body regions ✓ Manage Protective Device asset and commercial details ✓ Manage Protective Device custodianship details, wearers, business units Aprons ✓ Record environmentally responsible disposal of lead-based devices ✓ Protective device defect reporting and tracking, import defect photographs Protective device defect analysis, actions, follow-up and resolution Thyroid Protective device attachments; correspondence, documentation, reports ✓ Demonstrate compliance: protective device attenuation testing records ✓ Analyse protective device attenuation test findings, import test reports Multipurpose ✓ Attenuation test scheduling

Protective Device Features



Regulated Devices and Materials

Historion's Radiation Safety Purpose for Protective Devices and Materials includes Maintenance, Servicing, Test Records, Fault Diagnosis and Documentation. The following functions are covered;

Regulated	Radiation Safety Function or Context
lonising	 ✓ Radiography/fluoroscopy, X-Ray, densitometry and tomography asset data ✓ Record routine maintenance, service and test event logs, defect tracking ✓ Monitor regulatory compliance, licensing, audits and certification events
Sealed	 ✓ Manage gamma cameras/knives, neutron devices and irradiating tools ✓ Manage sealed source assets by Radionuclide and Security Classification ✓ Monitor regulatory compliance, licensing, audits and certification events
Unsealed	 ✓ Manage irradiating materials by Security Classification and Radionuclide ✓ Monitor permits, storage, disposal, specifications and movement ✓ Monitor regulatory compliance, licensing, audits and certification events
Facilities	 ✓ Manage Licence, accreditation and certification details by Facility ✓ Manage supporting documents and applicable records by Facility ✓ Manage and track ongoing compliance by Facility
Laser	 ✓ Complete inventory of laser devices by type, category and security level ✓ Manage laser device services, testing and defects ✓ Record operator experience, access levels and permissions by device
Equipment	 ✓ Complete inventory of all Equipment items by type, category and security ✓ Monitor all Equipment types for compliance and certification due dates ✓ Report operator experience and usage across all Equipment types
Specifications	 ✓ Create standards-based Specification definitions by Equipment Type ✓ Create specialised state or regulatory specifications by Equipment Type ✓ Record specific equipment specification data against prepared definitions



Training

Ensure required radiation safety training levels for staff are met, including monitoring courses attended, applicable qualifications and experience.

Training record results and proof of radiation safety knowledge investment. Registers of providers, courses, accreditation levels and industry qualifications. Functions covered;

Training Inputs	Radiation Safety Function or Context
Institutes	 ✓ Starting list; registered providers of Radiation Safety courses by jurisdiction ✓ Editable Training Institute register; contact details, locations etc. ✓ Register smaller providers, consultants, small companies and sole traders
Qualifications	 ✓ Formal Australian Qualification Association (AQA) published framework ✓ Equate new or international courses to known AQA qualification levels ✓ Qualification level descriptions and selection guide per www.aqf.edu.au
Courses	 ✓ Starting list; known Radiation Safety related courses by jurisdiction ✓ Course Register detailing Government and AQA qualification levels ✓ Course detail breakdown, marking methodology, supporting documents
Accreditation	 ✓ Starting list; published Radiation Safety Accreditation levels by jurisdiction ✓ Manage Licence levels, Licence conditions, supporting docs by jurisdiction ✓ NSW AI and S Radiation Usage Qualification streams and supporting docs

Training and Accreditation Features



Wearer Training Radiation Safety Function or Context ✓ Register Radiation Safety Course results and experience by participant ✓ Import scanned and other electronic result summary files and reports ✓ Retain proof of industry qualification, Licence and accreditation certificates ✓ Register Operators by Equipment and associated usage permissions ✓ Associate Operator Training and Qualifications with Equipment privileges ✓ Retain proof of Induction and Safety Program education and compliance

Wearer Training and Skill Features



Compliance

Historion's Radiation Safety Purpose for Centres is the Management of Radiation Safety outcomes by Organisational Unit. The following functions are covered;

Licenses	Radiation Safety Function or Context
Compliance	 ✓ Import and retain electronic copies of Licence and permit documents ✓ Manage and observe Licence and permit conditions ✓ Plan for Licence and permit expiry and reapplication

Compliance Features



Tools

Historion provides a Tools tab for a range of Radiation Safety tasks. Over time this tab will expand to include a range of additional tools that the Historion development team is working on. The Historion Tools tab includes;

National Dose Register	Radiation Safety Function or Context
Registration	 ✓ Register your Organisation with the National Radiation Dose Register ✓ Register your Sites with the National Radiation Dose Register ✓ Register your Wearers with the National Radiation Dose Register
Readiness	 ✓ Detect gaps in Wearer or Dose data affecting lodgement of submissions ✓ Retain Submission Readiness logs for data correction and completion ✓ Assess Submission Readiness by exposure Quarter and Site
Submissions	 ✓ Construct quarterly exposure Submissions for the National Dose Register ✓ Retain submission history and National Dose Register lodgement receipts ✓ Re-submit prior National Dose Register Submissions as new versions

National Dose Register Features



Reports

Historion includes a set of feature rich, flexible powerful data reporting capabilities.

The Reports tab includes standard, pre-stylized reports, filtering and analysis tool for exporting and working with data and a full suite of development utilities for custom report creation;

Reports Radiation Safety Function or Context Run standardised, pre-designed Reports from a canned set of over 30 Select from a range of report parameters by report type Export report output to Excel or PDF format for retention and distribution Create new custom reports from templates or from scratch Save and resume ongoing custom report design and development work Publish custom developed reports to the central list for use by other users List all detected data Exceptions across all imported Dose Reports Maintain data Exception responses and comments from a central location Export data Exceptions to Excel for further analysis and review

Reporting Features

Report Data	Radiation Safety Function or Context
Extract	 ✓ Export all raw content from selected Historion database tables to CSV file ✓ Migrate raw CSV data to other database systems as needed ✓ Reconstruct data entities via record IDs outside of the Historion database
Inspect	 ✓ Combine selected Dose Report contents into a single Excel worksheet ✓ Interrogate compiled exported raw data in Excel for matching dose Types ✓ Extract compiled raw data across Dose Reports by Centre or Campus

Data Extraction and Analysis Features



Report Settings Radiation Safety Function or Context Set availability of standard and custom canned reports in the reports list Adjust the visibility of the Report Header in the output of a selected report Adjust the visibility of the Report Footer in the output of a selected report Adjust all system and custom-built canned report selection descriptions. Adjust standard and custom canned reports main report title text. Adjust canned reports report footer text messages (e.g. RSO message)

Report Settings Features

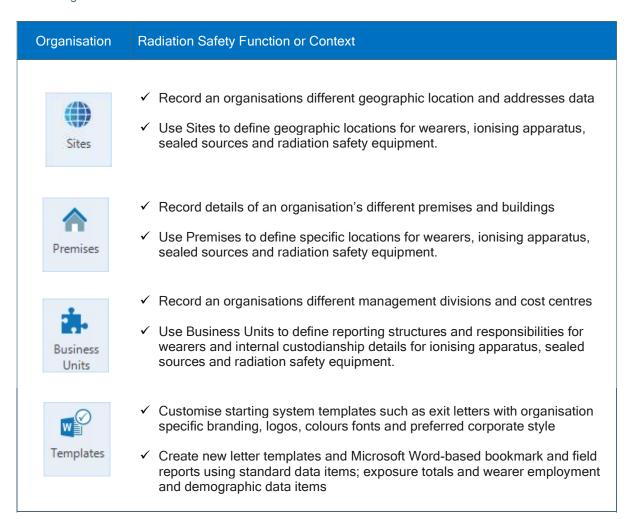


Administration

System Administration capabilities are a vital component of any software. Historion has sophisticated and highly flexible settings and options for different deployments scenarios and customer types.

Access Rights Radiation Safety Function or Context ✓ Maintain the Historion Users list, activate and deactivate User Access. ✓ Assign custom permissions with access to specific tabs and features ✓ Control User access to online data transfer utilities and options ✓ Provide access to features via a set of standard permission groups; Roles ✓ Create custom Roles aligned to unique organisational access preferences ✓ Assign organisational Centre and Business Unit context-based Role access

Access Rights Features





System Addiation Safety Function or Context Maintain global system Reference List values (dropdown list contents) Settings Settings Addiation Safety Function or Context Maintain global system Reference List values (dropdown list contents) Set system-wide options; graphics; report logos online data transfer setup Configure core system supporting features such as SMTP email settings Switch optional system features on or off Switch addressing standard modes (Australian or International) Set Wearer ID data matching option using Unique ID data transfer field

System Settings and Options

Dosimetry Schema	Radiation Safety Function or Context
Types	 ✓ View Dose Report Type schema, (field definitions, names and data types) ✓ Enable or Disable Dose Report Types, export schema and Type examples ✓ Import new XML-based Dose Report Type definitions for new Providers
Applications	 ✓ Maintain or create new Radiation Safety Dose Applications ✓ Maintain or create new provider-specific Dose Application Rules ✓ Maintain or create new Unified Location Terms spanning common Rules

Dosimetry Report Schema

Scripts	Radiation Safety Function or Context
Run	 ✓ Reset settings and configuration options back to their defaults ✓ Automatically check and correct known data migration outcome anomalies ✓ Check other system admin options or run site specific data tasks

Administrative Scripting Features



Help

Help

Help	Radiation Safety Function or Context
į About	 ✓ Identify the current Historion code release (software version) ✓ Identify the current Historion database update (latest script run) ✓ Identify the current connection database server and database name
Licence	 ✓ Check a Historion Licence limit on active wearers and Licence expiry date ✓ Check a Historion implementation number (customer number) ✓ Produce a Licence Report of active wearers with readings in past 12 months
Support	 ✓ Access Historion Online Help, knowledge base and Historion User Group ✓ Contact support personnel, seek trouble shooting assistance ✓ Access documentation library, example data and training data
Innovation	 ✓ Preview soon to be released features ✓ Preview current Cybermynd development commitments ✓ Contribute to and influence Historion development direction

Help Features