TQMS - Documentation and verification of trainings and qualifications

white paper

ARCONDA.systems

eControl

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1 Introduction

The efficient provision and verfification of qualification measures is a challenge for the persons responsible.

EASA- and IATA-requirements as well as EU regulations require a precise verification management for the performed qualification measure, that provides appropriate information to third parties in order to enable them to authentically review the implementation and training results.

eControl provides a range of tools for the implementation and verification of qualification measures and supports the person responsible by keeping the expense for documentation and control low.

Templates and duplications enable a fast and easy creation of new qualification events including acquisition of training contents, participants lists and outcomes.

This white paper is an extension of the "Qualification Events"-white paper. The innovations and additions of the eControl qualification management in eControl are documented with a focus on verification management and automation.

Detailed Informationen about creating qualification events in eControl can be found in our white paper "Qualification events".

2 Verification information overview

All essential information about the qualification event - such as participation-type or event-components as well as training content, trainer and participants - must be saved and documented in order to satisfy verification requirements.

2.1 Qualifications

Event components, trainer profiles, examination components, examiner profiles and exam durations are recorded in the qualification master data for the participation types “initial training” and refresher/recurrent“

2.2 Qualification measures

A type of participation for the measure and additionally a divergent type of participation for each participiant can be specified in a qualification measure, in addition to the type of participation defined in the qualification master data, in order to map the different requirements for the participants.

2.3 Types of participation

The following types of participation can be recorded and extended to map any desired training program.

- **Initial training**
- **Refresher**
- **Repetition**
- **Refresher, Repetition combined**
- **Performance review**
- **Retraining**
- **Disciplinary measure**

2.4 Event components

Different event components can be combined in one qualification event to record the types of training in an appropriate manner. eControl enables the user to record and document multiple event components for each qualification measure.

- **Computer-based training**
- **Practical instruction**
- **Practice verification**
- **Theoretical instruction**
- **Training on the job**
- **Simulator training**

The event elements can be customised.

2.5 Examination components

Verification documents that may consist of different examination components can be defined for each qualification measure. eControl enables the recording of multiple examination components for the specified event:

- **Computer-based training test**
- **Checkout with checklist**
- **Observation of workmanship**
- **Personal meeting, approval by trainer**
- **Practical examination, approval by Trainer**
- **Written final exam**

The examination components can be customised.

2.6 Requirements of trainer and examiner

Trainers and examiners have to comply with different training profiles themselves to be fit for the respective event. The required trainer and examiner profiles are stored in the personal master data.

2.7 Same person as trainer / examiner

In many cases, the performance monitoring/examination is performed by the trainer himself. If it is necessary to prevent a trainer teaching the same content he later examines, a note can be made in eControl that critical training being given by the same person should be avoided.

2.8 By what right

Generally each user is given read permission for the qualification master data.

Modification of run times and other essential qualification parameters is only feasible for specially authorised persons. Access can be managed for each qualification individually.

3 Storing verification information in the qualification master data

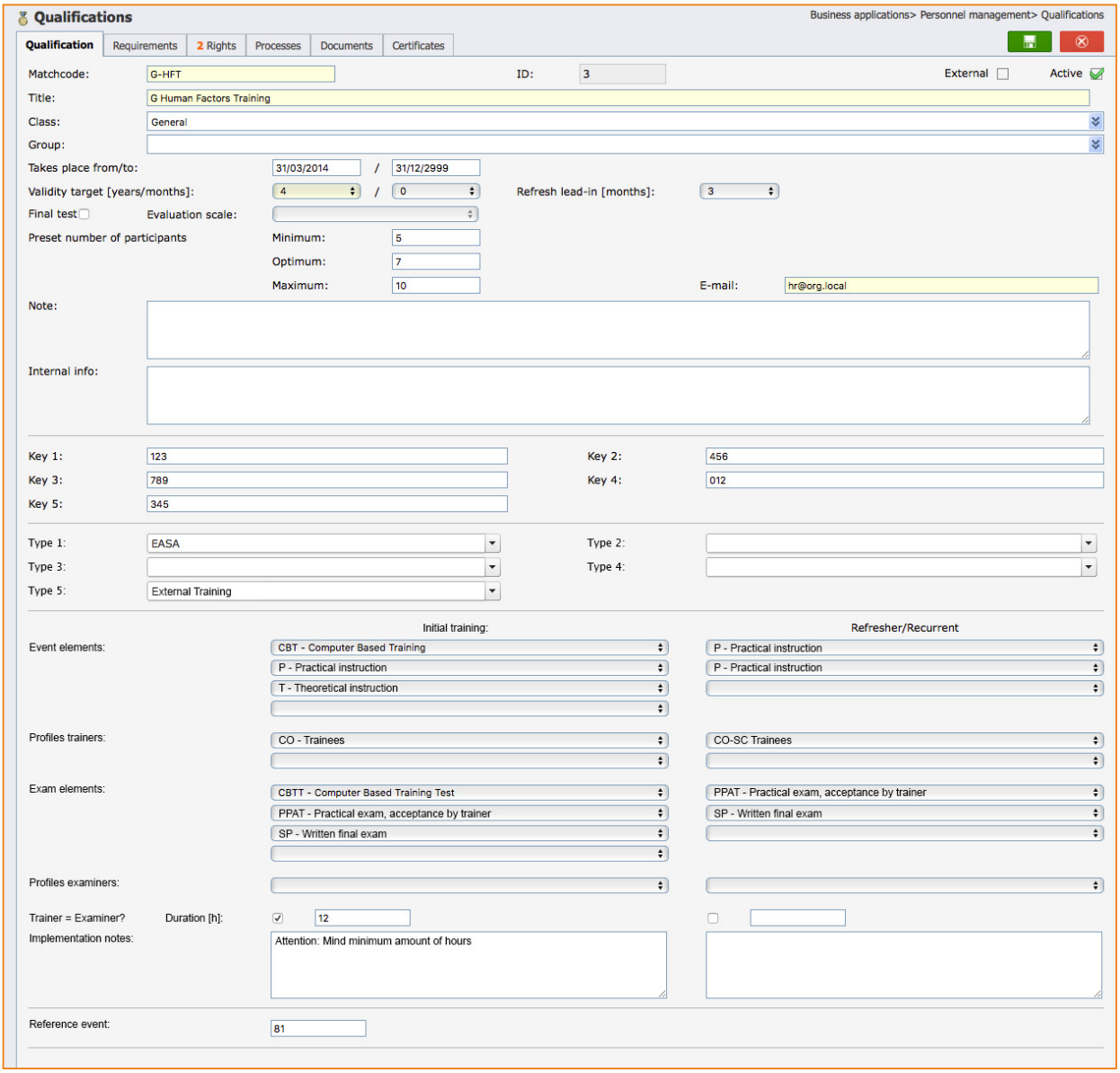
Qualification master data are created once and serve as a template for new qualification events with the respective qualification.

The event components, trainer profiles, examination components, examiner profiles and training duration for the initial training and the type of participation (refresher/recurrent) can be recorded in the qualification master data.

In addition, a training event can be defined as a reference training event in order to migrate its data and settings automatically to a new qualification event for the respective qualification.

3.1 Benefits of reference training events

The benefits of reference events are a reduced workload and the accelerated creation of events, which facilitate differentiated verification for different qualification events.



Qualification master data

4 Qualification events

Qualification events document training in detail and verify detailed information about place, time, implementation, trainer, examiner, results and other information.

A large part of the information to be recorded has been described in detail in the white paper "Qualification Events". In this document, the focus is on the data fields for verification.

When was training conducted
Start/end (start and end date/time of the event)

Where was training performed
Place of event
Note on place

How was training performed
Event components (computer-based training, practical instruction etc.)

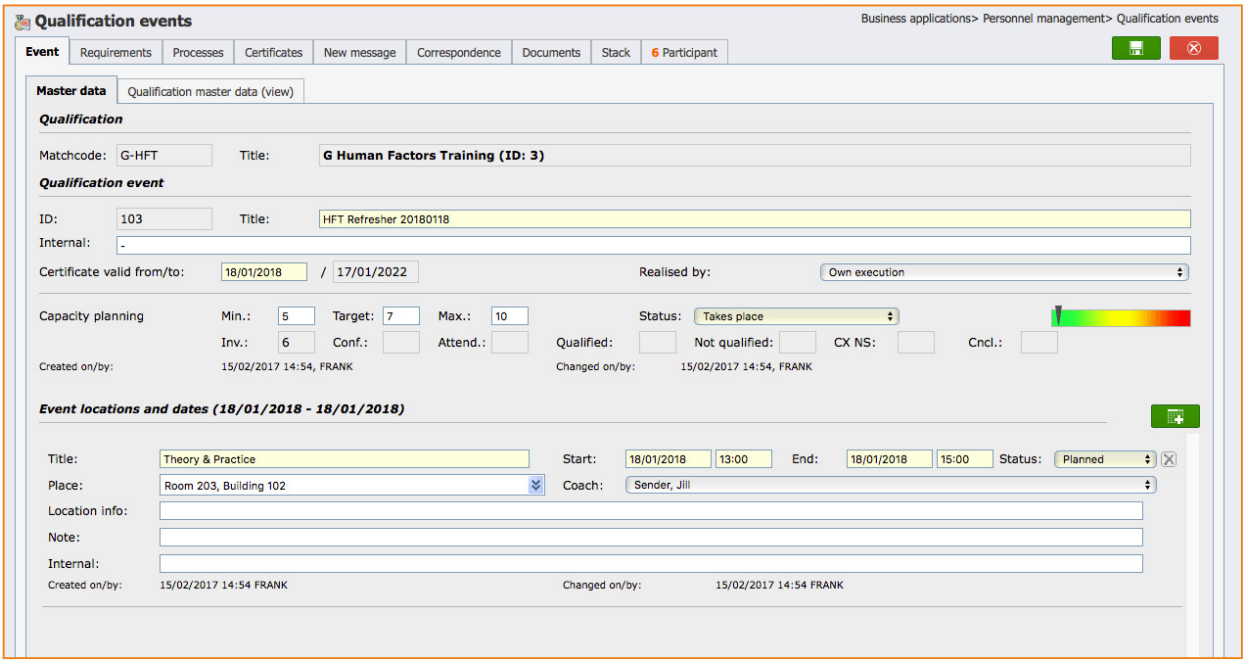
How was the examination performed
Examination components (CBT test, practical examination etc.)

Who conducted the training
Trainers

Who conducted examination
Examiners

Special notes
Note
Internal

The system provides multiple additonal options to document training-relevant facts in additon to the event information.



Qualification event

4.1 Requirements

So called “external requirements” have to be verified in order to achieve a qualification. They can be defined in the qualification master data for each qualification. The register tab “Requirements” gives an overview of which participant satisfies the respective requirements.

4.2 Creating new qualification events

New qualification events can be created in the user interface or imported from CBT or other systems via system interface.

4.3 Processes

The tab “Processes” displays the processes and process versions linked to the respective qualification events.

4.4 Certificates

List view with two options:

- **Participants grouped by certificates**
- **Certificates grouped by participants**

4.5 Creating messages

eControl TQMS provides numerous automation functions for the quick and accurate creation of single messages, newsletters and serial e-mails.

4.6 Correspondence

Overview of the correspondence with event participants.

4.7 Documents

Event-relevant documents -such as signature lists- are filed in the document archive.

4.8 Batches

The batch processing function speeds up tasks that normally have to be processed separately or consecutively for each participant. These tasks are:

- **Booking participant status**
- **Booking attendance status**
- **Creating certificates**

eControl offers the possibility of setting individual booking parameters for each job and batch-booking these for a list of participants.

Detailed Information about the individual tabs and their content is listed in the white paper "Qualification Events".

Detailed Informationen about creating qualification events in eControl is described in the white paper "Qualification events".

5 Participants

The tab “Participants” lists all course participants. By clicking on the symbol ,additional participants can be added. By clicking on participant specific information can be processed.

After selecting the participant for processing, differentiated information can be stored, filed under different tabs by content criteria for the sake of clarity.

5.1 Participation

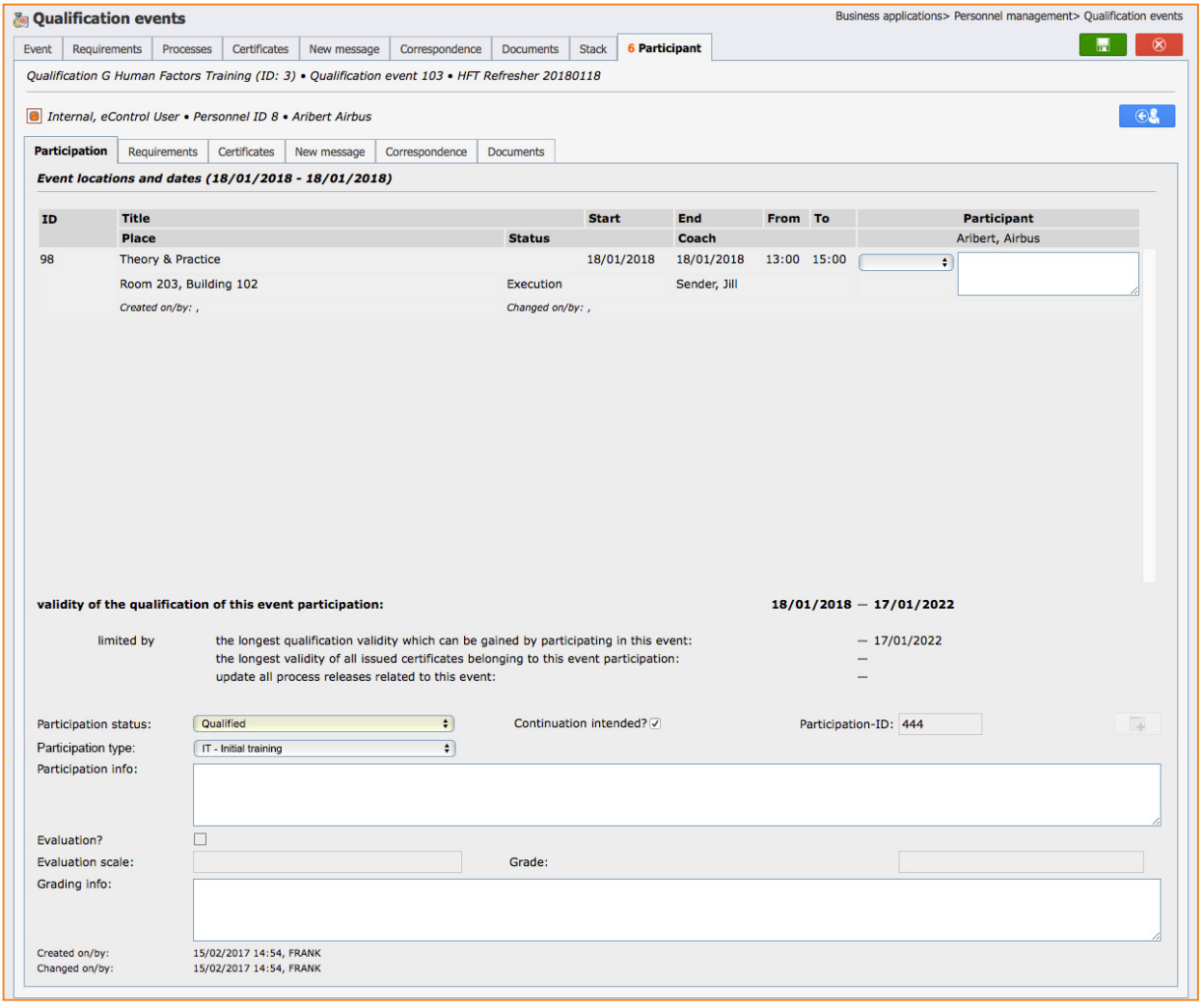
The tab “Participation” includes the essential detailed information on participation in a qualification event.

5.2 Participation type

It is possible that first time participants in a qualification event complete initial training and at the same time other participants attend refresher training.

This situation must be documented by the type of participation by participant

Further data fields are described in detail in the white paper “Qualification Events”



Tab Participants - Participation

5.3 Requirements

If company-based qualifications are a requirement for use, data is filed here.

5.4 Certificates

In this dialogue, certificates and information about the issue of the certificates can be edited for the current qualification event for current personnel.

5.5 Creating messages

eControl TQMS provides numerous automation functions for the quick and accurate creation of single messages, newsletters and serial e-mails.

5.6 Correspondence

Displays a correspondence list according to the selection criteria.

5.7 Documents

The verification documents are generally proofs of performance that are filed either by scanning and uploading or via a system interface.

Detailed information about individual tabs and their content is listed in the white paper: “Qualification Events”

Detail information about single tabs and their content, are described in our white paper: “Qualification events”

6 Templates and reproductions

eControl supports employees with a variety of options to create and reproduce qualifications and qualification events.

A new qualification event is generated after selecting a qualification. Part of the detailed information from the qualification is copied to the qualification event. Further details then have to be entered manually.

Events can be copied from events already recorded. In this way, event data, presets and participant data as well as status are transferred if appropriate.

7 Templates for new qualification events

What is the purpose of templates?

For example:

in a training program the “De-Anti-Icing Operator” qualification is always performed in the same way.

The event consists of theoretical instruction, a final test, simulator training incl. a final test and practical instruction including approval by a trainer.

The trainers, examiners and training times are also the same.

The template function allows selection of a qualification event with all the aforementioned detailed information and its use as a template for the qualification event “De-Anti-Icing Operator”.

If a new event is planned, only the implementation date has to be set. All details of the reference event are incorporated in the system.

The following data is incorporated from the reference event:

- Title
- Notice
- Internal notice
- Participation types
- Implementation times
- Event components
- Examination components
- Trainers
- Examiners
- Further detailed information

The implementation times are incorporated but not the implementation dates. The system recalculates the validity period for the target event.

8 Reproducing qualification events

Existing qualification events can be duplicated or reproduced in full.

The reproduction of qualification events can be used for instance for equipment qualifications -as with the training of participants on different equipment- who have been successively trained in practical implementation and have to be qualified separately.

A comprehensive report on all equipment trained with is signed on site and then transferred in a way that shows up information about to whom, when and on which qualification training was given.

Subsequently the qualification event is incorporated including training content, participants and 1:1 dates. The newly created event is modified accordingly.

8.1 What is the purpose of reproductions?

Especially in the case of equipment qualifications it is appropriate to train or retrain multiple different (individual) qualifications for an equipment class in one training session.

For instance a refresh-training event for bus drivers for five different busses (Cobus, Mercedes Benz, MAN etc.) could be implemented on one day, by one trainer with the same group of participants.

eControl enables the user to create the initial qualification event for the bus type “Cobus” - based on a template if applicable (see „7. Templates for new qualification events“). After the participants have been assigned and the proofs of performance scanned and inserted, an authorized eControl user can select the qualification event for the buses -four additional ones in the instance above- and reproduce all event information for the Cobus event at the press of a button.

Depending on the respective situation, only marginal reworking of the “cloned“ qualification events and -participation is necessary.

8.2 Which data is reproduced?

- **All qualification master data**
- **The event is named after the qualification**
- **All internal and external notes**
- **Status**
- **Date and time information**
- **Recalculation of the validity period**
- **Event components**
- **Exam components**
- **Trainers and examiners**
- **Participation type**
- **Location information**
- **Participants, including the participation status and the participation type as well as results**

8.3 By what right

The reproduction option is available when the logged-in user has the user right for editing events.

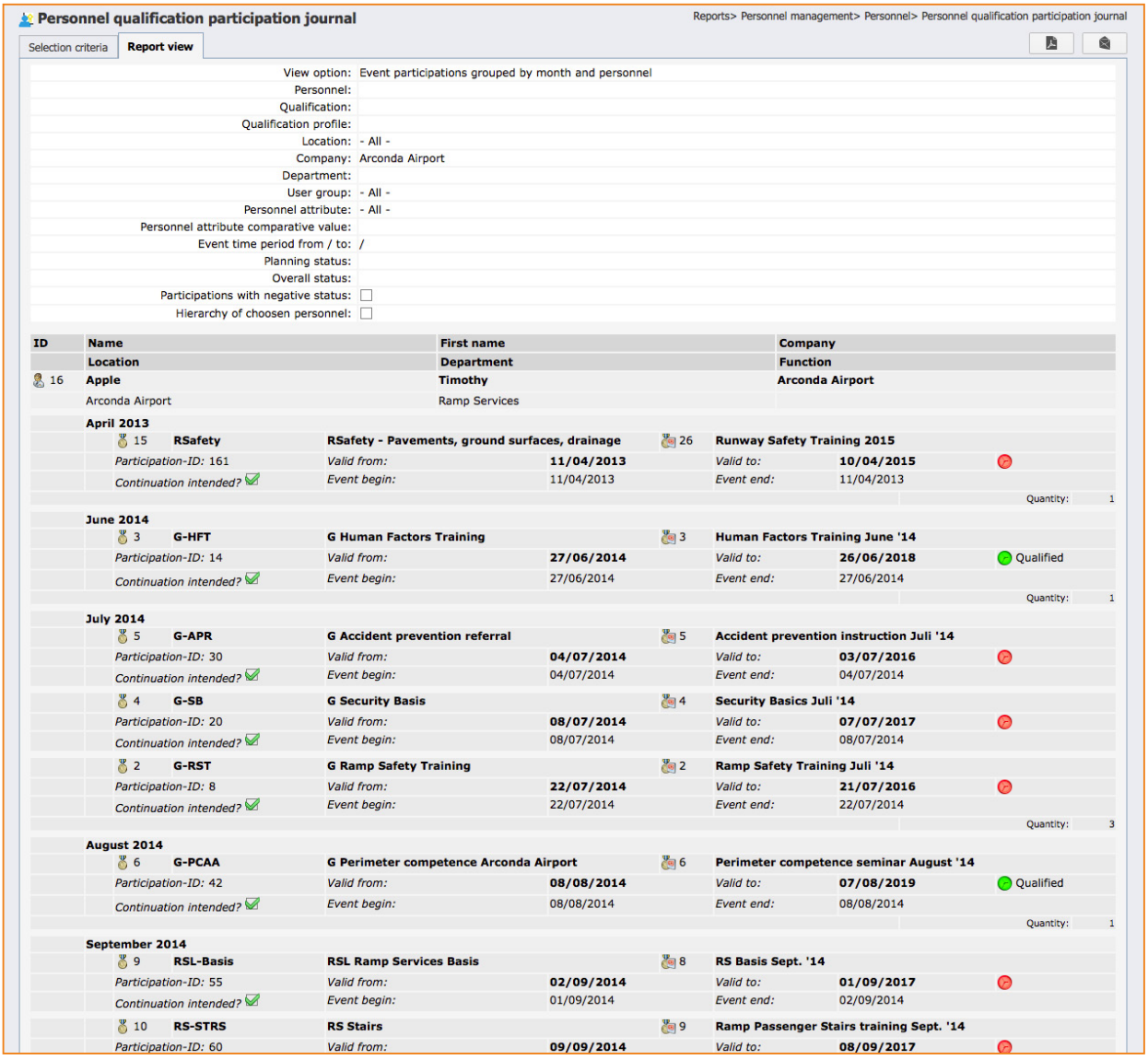
9 Reporting - 34 report generators

Reports are an important component in the verification of qualification measures. eControl provides 34 report generators, each with a variety of selection and display options that allow different views of the data on qualification measures.

Some report generators that can be used for the verification of events and participation are shown in the examples below.

9.1 Personnell qualification participation journal

The “Personnell qualification participation journal” answers the question: “Who has participated in which qualification event and when? And in which way this affected his qualification status?” The employee journal becomes part of the personnel file.



Personnel qualification participation journal

Reports> Personnel management> Personnel> Personnel qualification participation journal

Selection criteria | **Report view**

View option:	Event participations grouped by month and personnel
Personnel:	
Qualification:	
Qualification profile:	
Location:	- All -
Company:	Arconda Airport
Department:	
User group:	- All -
Personnel attribute:	- All -
Personnel attribute comparative value:	
Event time period from / to:	/
Planning status:	
Overall status:	
Participations with negative status:	☐
Hierarchy of choosen personnel:	☐

ID	Name	First name	Company
	Location	**Department**	**Function**
16	**Apple**	**Timothy**	**Arconda Airport**
	Arconda Airport	Ramp Services	

April 2013

15	**RSafety**	**RSafety - Pavements, ground surfaces, drainage**		26	**Runway Safety Training 2015**		
Participation-ID: 161	*Valid from:*	**11/04/2013**		*Valid to:*	**10/04/2015**		
Continuation intended? ☑	*Event begin:*	11/04/2013		*Event end:*	11/04/2013		
						Quantity:	1

June 2014

3	**G-HFT**	**G Human Factors Training**		3	**Human Factors Training June '14**		
Participation-ID: 14	*Valid from:*	**27/06/2014**		*Valid to:*	**26/06/2018**	Qualified	
Continuation intended? ☑	*Event begin:*	27/06/2014		*Event end:*	27/06/2014		
						Quantity:	1

July 2014

5	**G-APR**	**G Accident prevention referral**		5	**Accident prevention instruction Juli '14**		
Participation-ID: 30	*Valid from:*	**04/07/2014**		*Valid to:*	**03/07/2016**		
Continuation intended? ☑	*Event begin:*	04/07/2014		*Event end:*	04/07/2014		
4	**G-SB**	**G Security Basis**		4	**Security Basics Juli '14**		
Participation-ID: 20	*Valid from:*	**08/07/2014**		*Valid to:*	**07/07/2017**		
Continuation intended? ☑	*Event begin:*	08/07/2014		*Event end:*	08/07/2014		
2	**G-RST**	**G Ramp Safety Training**		2	**Ramp Safety Training Juli '14**		
Participation-ID: 8	*Valid from:*	**22/07/2014**		*Valid to:*	**21/07/2016**		
Continuation intended? ☑	*Event begin:*	22/07/2014		*Event end:*	22/07/2014		
						Quantity:	3

August 2014

6	**G-PCAA**	**G Perimeter competence Arconda Airport**		6	**Perimeter competence seminar August '14**		
Participation-ID: 42	*Valid from:*	**08/08/2014**		*Valid to:*	**07/08/2019**	Qualified	
Continuation intended? ☑	*Event begin:*	08/08/2014		*Event end:*	08/08/2014		
						Quantity:	1

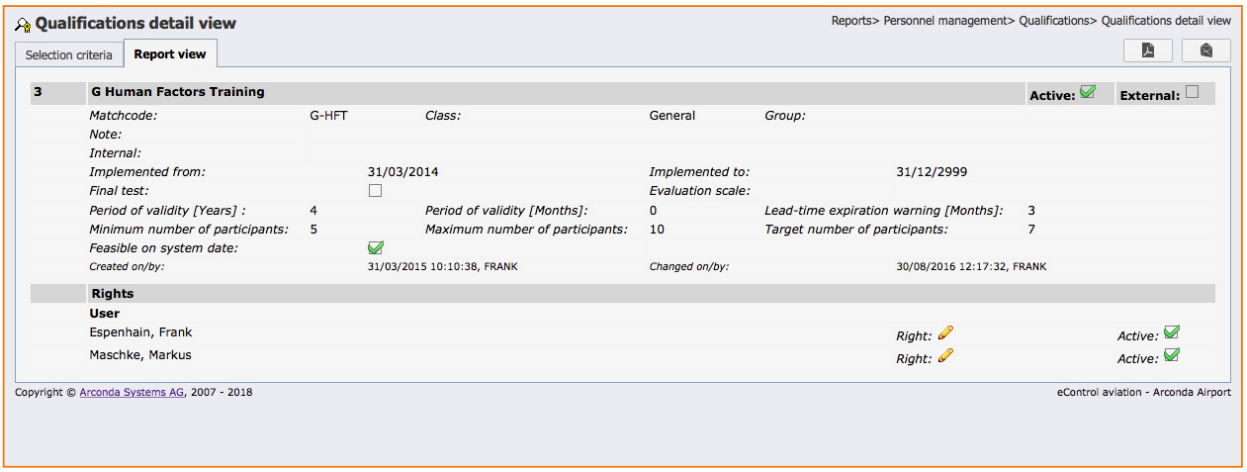
September 2014

9	**RSL-Basis**	**RSL Ramp Services Basis**		8	**RS Basis Sept. '14**		
Participation-ID: 55	*Valid from:*	**02/09/2014**		*Valid to:*	**01/09/2017**		
Continuation intended? ☑	*Event begin:*	01/09/2014		*Event end:*	02/09/2014		
10	**RS-STRS**	**RS Stairs**		9	**Ramp Passenger Stairs training Sept. '14**		
Participation-ID: 60	*Valid from:*	**09/09/2014**		*Valid to:*	**08/09/2017**		

Personal Qualifikationsteilnahmen gruppiert nach Personal und Monaten

9.2 Qualifications detail view

This report verifies qualifications in the system.



Qualification event detail view

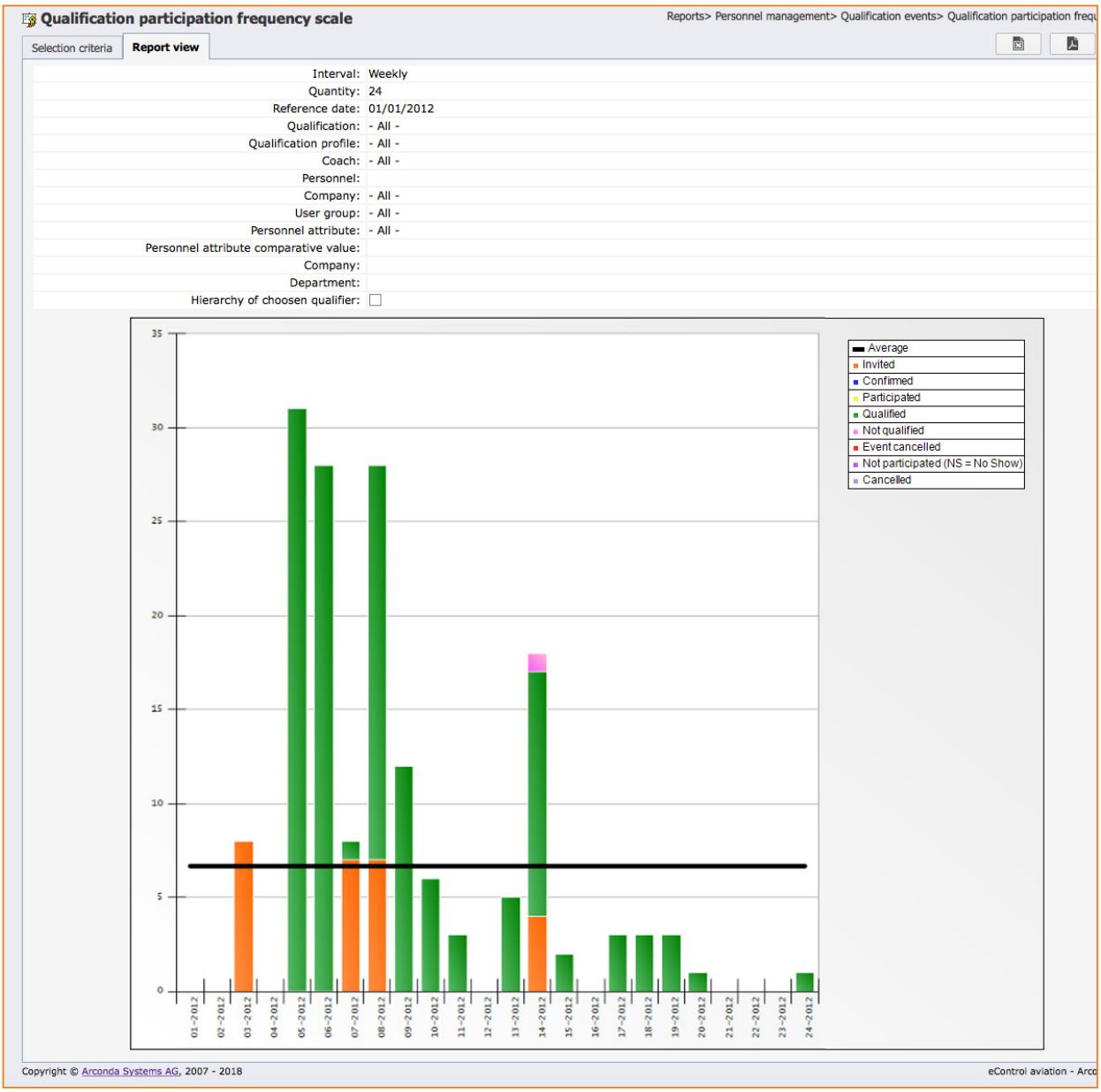
9.3 Qualification participation frequency scale

The report “Qualification participation frequency scale” provides an overview of the number of people trained. People are color coded by their qualification attributes.

For individual qualifications it becomes clear whether the number of qualified persons can be increased significantly by improving the test results.

Furthermore, it may be appropriate to carefully coordinate lead times and scheduling with the specialist departments, if a significant proportion of participants cannot be qualified because “cancelled”, “discontinued” or “not participated”.

The economic aspects of the latter are also of interest.

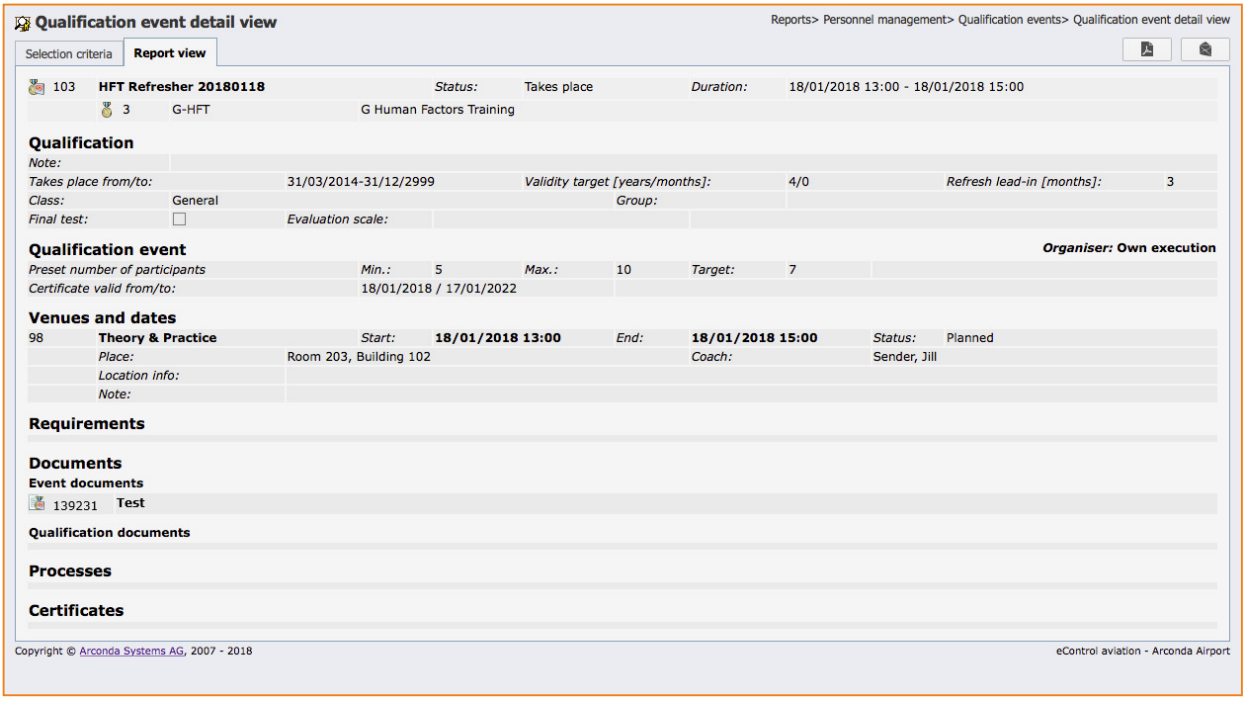


Qualification participation frequency scale

9.4 Qualification event detailed view

This description is used by examiners, trainers and those responsible for training, to prepare and document events.

At the same time this report can be used to verify past events including all implementation details.



Qualification event detail view

eControl

Process Management | Operation Management | Safety Management | Audit Management | Qualification Management | Compliance Management | Environmental Bird Control Management / Risk Assessment

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