Business Unit MR

Component Specification Template (MR)

***Log file handling***

*Approver (User): Component Engineer, Subsystem Owner*

*Approver (Accountable): Component Engineer Manager*

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# Introduction

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| INFO 19919  Rev: 1  **✓** | Purpose  Model: [All] FS: [All] GS: [All] Options: []  Signatures: During the introduction of electronic signature the initial approval state of this entity has been set to Approved. This was based on the fact that this item was approved as part of a pre- electronic signature project [R5.1.1 / R5.1.2 / R5.1.7]  Approval Status: [Approved]  The purpose of this document is to describe the functionality of handling log files in the directory with the logical name GYRO\_LOG. This includes central log files, local logfiles and statistic log files. |
| INFO 19920  Rev: 1  **✓** | Scope  Model: [All] FS: [All] GS: [All] Options: []  Signatures: During the introduction of electronic signature the initial approval state of this entity has been set to Approved. This was based on the fact that this item was approved as part of a pre- electronic signature project [R5.1.1 / R5.1.2 / R5.1.7]  Approval Status: [Approved]  This document describes the handling of log files. It doesn’t describe the functionality of logging application like viewing of log files. |
| INFO 79769  Rev: 1  **✓** | References\_v1  Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Narasimhan, Manjunath (310080850) on 2020-06-03 13:14:30 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: Ojha, Abinash (310100542) on 2020-05-29 11:35:19 Meaning: SME Approved - (Business)::Bulk Transitions Signed by: Pawar, Poojitha M (310285258) on 2020-03-11 06:33:21 Meaning: SME Approved - (Technical)::Bulk Transitions  Approval Status: [Approved]     |  |  |  |  | | --- | --- | --- | --- | | **Reference** | **Title of document** | **id** | **revision** | | *[SSRQ]* | sSRQ Infrastructure | DHF356898 | *00* | |
| INFO 19924  Rev: 1  **✓** | Definition of terms and abbreviations  Model: [All] FS: [All] GS: [All] Options: []  Signatures: During the introduction of electronic signature the initial approval state of this entity has been set to Approved. This was based on the fact that this item was approved as part of a pre- electronic signature project [R5.1.1 / R5.1.2 / R5.1.7]  Approval Status: [Approved]   |  |  | | --- | --- | | *Term* | *Description* | | RSC | Remote Service Center | | SRS | System Requirement Specification | | yyyy | Year in four digits [0000:9999] | | mm | Month in two digits [1:12] | | dd | Day in two digits [1:31] | | ww | Week in two digits [01:53] | | hh | Hour in two digits [00:23] | | mm | Minute in two digits [00:59] | | ss | Second in two digits [00:60] | | nnnn | Order number in four digits [0000:9999] | | Gyro\_log | Standard logging directory | |

# Component Overview

## Product Perspective

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| FOLDER 19927  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: During the introduction of electronic signature the initial approval state of this entity has been set to Approved. This was based on the fact that this item was approved as part of a pre- electronic signature project [R5.1.1 / R5.1.2 / R5.1.7]  Approval Status: [Approved]  Log file handling comprises a number of functions to manipulate log files. |

## Product Functions\_v1

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| FOLDER 79770  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Narasimhan, Manjunath (310080850) on 2020-06-17 09:06:05 Meaning: QA Approved - (QA) Signed by: Ojha, Abinash (310100542) on 2020-06-17 08:49:04 Meaning: SME Approved - (Business) Signed by: Pawar, Poojitha M (310285258) on 2020-03-11 06:33:23 Meaning: SME Approved - (Technical)::Bulk Transitions  Approval Status: [Approved]  Log file handling consists of the following functional areas:   * Daily check on new log file at 00:00. * Deleting log files. |

## File types\_v2

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| FOLDER 97948  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Laskar, Dilwar (320159287) on 2025-05-16 16:10:45 Meaning: QA Approved - (QA) Signed by: Mishra, Saurabh (320193880) on 2025-05-15 14:30:51 Meaning: SME Approved - (Technical) Signed by: N, Kanagaraj (310038840) on 2025-05-15 14:06:49 Meaning: SME Approved - (Business)  Approval Status: [Approved]  The following file types exists:   |  |  |  |  | | --- | --- | --- | --- | | **File type** | **Format** | **Directory**  **(Logical name)** | **Description** | | Central | log’yyyymmddnnnn’.log | GYRO\_LOG | This is the central log file in which all messages are written except trace logging. | | DevCentral | devlog’yyyymmddnnnn’.log | GYRO\_LOG | This is the central log file in which all messages including trace messagesare written. | | Windows events | el\_yyyymmddhhmmss\_application.log  el\_yyyymmddhhmmss\_system.log | GYRO\_LOG | Logfiles extracted from the Windows event viewer. | | RMMU files | rmmu\_yyyymmdd\_hhmmss | GYRO\_LOG | A daily dump file for the RMMU. | | Other logfiles | \*.log | GYRO\_LOG | Files with extention .log, not being one of the previous defined types. | | Lfx files | \*.lxf | GYRO\_LOG | Files with extention .lxf, temporary files generated by logbrowser. | | RespPhase files | RespPhase\_yyyymmdd\_hhmmss\_\*.csv | GYRO\_LOG\scanphyslog | 4DMR Respiratory Phase classification logs with extension .csv | |

## General constraints

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| FOLDER 19930  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: During the introduction of electronic signature the initial approval state of this entity has been set to Approved. This was based on the fact that this item was approved as part of a pre- electronic signature project [R5.1.1 / R5.1.2 / R5.1.7]  Approval Status: [Approved]  No file handling function may block the logging of messages by application programs. |

## Assumptions and Dependencies\_v1

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| FOLDER 79772  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Narasimhan, Manjunath (310080850) on 2020-06-17 08:57:34 Meaning: QA Approved - (QA) Signed by: Ojha, Abinash (310100542) on 2020-06-17 08:48:00 Meaning: SME Approved - (Business) Signed by: Pawar, Poojitha M (310285258) on 2020-03-11 06:33:26 Meaning: SME Approved - (Technical)::Bulk Transitions  Approval Status: [Approved]   * All relevant third-party log files must be stored in the Gyro\_log directory. * The logging server handles the automatic creation of the daily new central log file. * All functions will run automatically in the background and start at a certain time. They will also be started when the system is booted up and the corresponding function has not been executed yet. This starting time may vary between systems. * Checking if a function has already been executed will be done inside the programs since Windows taskscheduler does not have this capability. * All times mentioned are local times. |

# Specifications

## Functional Specifications

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| SPEC 97920  Rev: 1  **✓** | SWCMP.INFRA.LogFileHandling.Logging.Functions\_v2  Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Laskar, Dilwar (320159287) on 2025-05-16 16:09:53 Meaning: QA Approved - (QA) Signed by: Mishra, Saurabh (320193880) on 2025-05-15 14:29:03 Meaning: SME Approved - (Technical) Signed by: N, Kanagaraj (310038840) on 2025-05-15 14:05:13 Meaning: SME Approved - (Business)  Approval Status: [Approved]  This document describes requirements for the handling of log files.    1) Each day at 00:00 at check is performed whether a new central logfile must be created. This check will always result in a new central logfile for that day.  2) Log file should contain the system hardware configuration and enabled software license options  3) To save diskspace, each day at 01.00 AM the following log files in Gyro\_log directory are deleted the moment their corresponding age has passed.     |  |  | | --- | --- | | **Type of logfile(\*)** | **Delete when…** | | Central | older than 5 months. | | DevCentral | older than 7 days. | | Event Log | older than 7 days. | | Windows events | older than 6 weeks. | | RMMU files | older than 6 months | | Other logfiles | older than 5 days. | | Lxf files | Older than 5 days. | | RespPhase files | Older than 6 days. |     (\*)See section 2.3 for an explaination of the types of logfiles.  In order to prevent  a hangup of the system,  the free diskquota of the disk which contains the log files must be larger than 20 %. This will be archieved  by deleting the oldest cental logfiles until the free disk quota is larger than 20%. Only Central log files older than 31 days will be deleted. |

### Daily check on new log file.

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| FOLDER 19933  Rev: 2  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Satheesan, Sajith (ing11487) on 2017-05-18 11:00:42 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: I, KISHORE (310046750) on 2017-05-18 10:59:57 Meaning: SME Approved - (Technical)::Bulk Transitions Signed by: Natha, Sriranga (ing02494) on 2017-05-18 09:47:12 Meaning: SME Approved - (Business)::Bulk Transitions  Approval Status: [Approved]  Each day at 00:00 at check is performed whether a new central logfile must be created. This check will always result in a new central logfile for that day. |

### Daily deletion of obsolete logfiles.\_v2

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| FOLDER 97947  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Laskar, Dilwar (320159287) on 2025-05-16 16:10:21 Meaning: QA Approved - (QA) Signed by: Mishra, Saurabh (320193880) on 2025-05-15 14:30:08 Meaning: SME Approved - (Technical) Signed by: N, Kanagaraj (310038840) on 2025-05-15 14:05:56 Meaning: SME Approved - (Business)  Approval Status: [Approved]  To save diskspace, each day at 01.00 AM the following log files in Gyro\_log directory are deleted the moment their corresponding age has passed.   |  |  | | --- | --- | | **Type of logfile(\*)** | **Delete when…** | | Central | older than 5 months. | | DevCentral | older than 7 days. | | Windows events | older than 6 weeks. | | RMMU files | older than 6 months | | DBServer errors | older than 6 months | | Other logfiles | older than 5 days. | | Lxf files | Older than 5 days. | | RespPhase files | Older than 6 days. |     (\*)See section 2.3 for an explaination of the types of logfiles.  In order to prevent  a hangup of the system,  the free diskquota of the disk which contains the log files must be larger than 20 %. This will be archieved  by deleting the oldest cental logfiles until the free disk quota is larger than 20%. Only Central log files older than 31 days will be deleted. |

### Order of execution

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| FOLDER 19937  Rev: 2  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Satheesan, Sajith (ing11487) on 2017-05-18 11:00:47 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: I, KISHORE (310046750) on 2017-05-18 11:00:03 Meaning: SME Approved - (Technical)::Bulk Transitions Signed by: Natha, Sriranga (ing02494) on 2017-05-18 09:47:18 Meaning: SME Approved - (Business)::Bulk Transitions  Approval Status: [Approved]  The order of execution of the various functions will be:   1. Daily check on new log file. 2. Daily deletion of log files. 3. Weekly creation of new statistic overview file 4. Weekly creation of new total statistic overview file 5. Weekly creation of new error overview file   Depending on the machineload, these programs can run on the same time or on separate times. |

### Order of execution\_v1

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| FOLDER 81105  Rev: 1  **✓** | Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Narasimhan, Manjunath (310080850) on 2020-06-03 13:14:34 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: Ojha, Abinash (310100542) on 2020-05-29 11:35:12 Meaning: SME Approved - (Business)::Bulk Transitions Signed by: Pawar, Poojitha M (310285258) on 2020-05-28 12:21:49 Meaning: SME Approved - (Technical)  Approval Status: [Approved]  The order of execution of the various functions will be:   1. Daily check on new log file. 2. Daily deletion of log files.   Depending on the machineload, these programs can run on the same time or on separate times. |

## Essential Specifications

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| FOLDER 66999  Rev: 1  **✓** | Model: [] FS: [] GS: [] Options: []  Signatures: Signed by: Satheesan, Sajith (ing11487) on 2017-05-18 11:00:50 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: I, KISHORE (310046750) on 2017-05-18 11:00:06 Meaning: SME Approved - (Technical)::Bulk Transitions Signed by: Natha, Sriranga (ing02494) on 2017-05-18 09:47:20 Meaning: SME Approved - (Business)::Bulk Transitions  Approval Status: [Approved]  Not Applicable. |

## Non-Functional Specifications

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| FOLDER 67000  Rev: 1  **✓** | Model: [] FS: [] GS: [] Options: []  Signatures: Signed by: Satheesan, Sajith (ing11487) on 2017-05-18 11:00:52 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: I, KISHORE (310046750) on 2017-05-18 11:00:08 Meaning: SME Approved - (Technical)::Bulk Transitions Signed by: Natha, Sriranga (ing02494) on 2017-05-18 09:47:22 Meaning: SME Approved - (Business)::Bulk Transitions  Approval Status: [Approved]  Not Applicable. |

## Compliance Specification

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| FOLDER 81108  Rev: 1  **✓** | Model: [] FS: [] GS: [] Options: []  Signatures: Signed by: Narasimhan, Manjunath (310080850) on 2020-06-03 13:14:36 Meaning: QA Approved - (QA)::Bulk Transitions Signed by: Ojha, Abinash (310100542) on 2020-05-29 11:35:14 Meaning: SME Approved - (Business)::Bulk Transitions Signed by: Pawar, Poojitha M (310285258) on 2020-05-28 12:39:37 Meaning: SME Approved - (Technical)  Approval Status: [Approved]  Not Applicable. |

# Component Traceability

**Attachment:**

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| RTM CS Log file handling.xlsm |

# Document History

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| INFO 97950  Rev: 1  **✓** | Document History\_v2  Model: [All] FS: [All] GS: [All] Options: []  Signatures: Signed by: Laskar, Dilwar (320159287) on 2025-05-16 16:11:07 Meaning: QA Approved - (QA) Signed by: Mishra, Saurabh (320193880) on 2025-05-15 14:31:37 Meaning: SME Approved - (Technical) Signed by: N, Kanagaraj (310038840) on 2025-05-15 14:07:30 Meaning: SME Approved - (Business)  Approval Status: [Approved]   |  |  |  |  | | --- | --- | --- | --- | | **Date** | **Level** | **Editor** | **Description** | | 15-May-2025 | 00 | Melvin Ouseph Jacob | Requirement update for Respiratory Phase classification file | |

