OPERATE. UNDERSTAND. VERIFY.

External Service Technician User Handbook

Uptime Control 2.0.0-alpha.1

Detailed procedures, clear responsibilities and traceable checks.

Edition 25 November 2026
Linux x86_64 + Docker | V2 pilot documentation

No real customer data in illustrations. Usage rights follow the separate agreement.

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01 Scope and your route through V2

This edition describes 2.0.0-alpha.1 using local source code and pilot evidence dated 21/22 November 2026. Documentation date: 25 November 2026. This is a pilot build; a manual does not constitute production acceptance. Existing core functions and the new workflows are explained together.

1. Sign in with your personal account and second factor. Check your identity, site and assigned machines.

2. Technicians start with the guided intervention. Service managers configure procedures and handle open cases. Warehouse staff use the inventory workspace.

3. Practise only on an explicitly approved training site. Illustrations contain synthetic training data, not a customer installation.

4. After each posting, check the confirmation and the stored result. Completing a form is not the same as saving it.

The previous role guides are included and extended with V2 chapters. Older screenshots illustrate core functions; V2 screenshots were captured during the pilot on 21/22 November 2026. They document that build, not a new operational acceptance performed today.

Language and screen labels

The service workflow supports German and English. The warehouse and procedure editor retain German labels in this build. English instructions therefore also give the actual German control names. Free text is not automatically translated.

02 Account, MFA and session: practical walkthrough

Before signing in

Use the address supplied by your administrator and check the hostname. Do not bypass certificate warnings on a real installation. The synthetic addresses in screenshots are not customer login addresses.

1. Open the application in your supported browser. Follow its sign-in redirect to the organisation's identity service.

2. Enter your personal username and password. Do not use a colleague's account, even for an urgent repair.

3. If prompted to change an initial password, choose a unique password that satisfies the displayed policy. Store it through your approved password-management process.

4. If authenticator enrolment is required, use your approved authenticator, scan the displayed enrolment code and enter its current one-time code. Treat the enrolment secret as a credential; never include it in a service report or support screenshot.

5. At later sign-ins, enter the current code. If rejected, check the device clock and wait for a fresh code before retrying. Repeated guesses can make access recovery harder.

6. Confirm the identity shown in the application. Check the machine or airport scope before entering any data.

7. Select English where necessary. Internal and external technicians may land directly in the five-step service workspace rather than the analysis dashboard.

8. When finished, use Sign out. On shared devices, wait for confirmation and close the browser session. An unconfirmed sign-out message means that you must retry; closing a tab alone is not proof of server-side sign-out.

Lost authenticator or changed phone

Contact the administrator through a known route. Supply your account identifier, not your password or a live one-time code. The administrator must verify your identity before resetting MFA. A reset can end existing sessions and require new enrolment. Do not ask a colleague to submit work under their name while you recover access.

Expired session during work

If the application says the session expired or access was revoked, sign in again. Check whether a previous save received confirmation before recreating it. A locally retained form is not a guarantee that the server stored it. Verify the final record reference and state.

Success check

You can identify your signed-in account, permitted scope and intended task. If the expected machine is absent, request a scope correction; do not choose a similarly named machine to proceed.

Additional navigation and account notes

This user manual covers the V2 pilot edition; established core workflows are retained from the V1 manuals. Linux with Docker is the server platform; users work in a browser. The service and ticket module is enabled in the documented edition; individual role and scope permissions still apply.

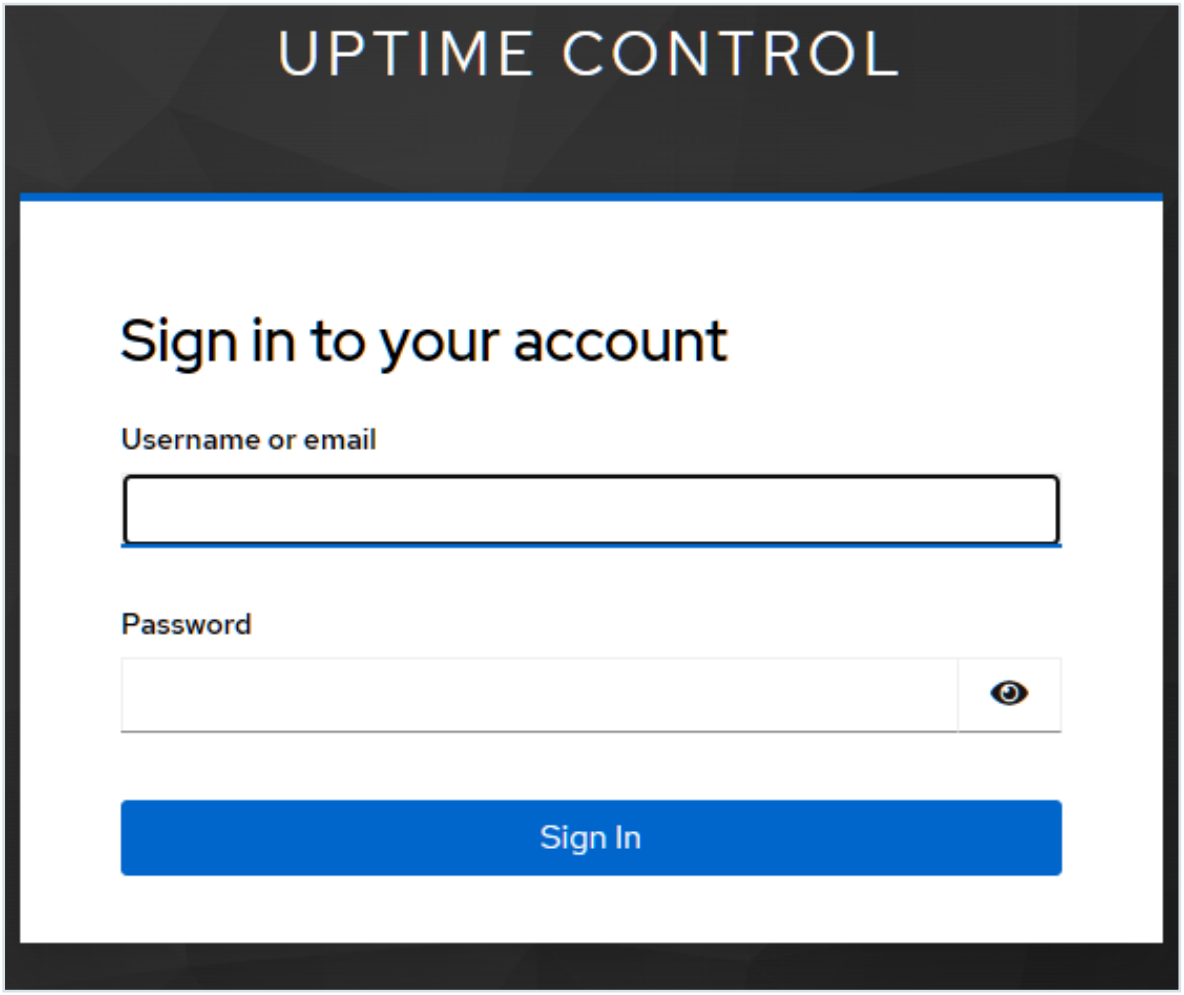
Open only the operator-provided HTTPS address. Use your personal account. The first administrator login in this installation package requires one-time-code enrolment. Scan the QR code only with your own authenticator app, confirm the current code, then sign in again. Do not retain or send pictures of the QR secret.

If a code is rejected, verify automatic phone time, wait for the next code and retry. Contact the designated administrator if the factor is lost. Browser and server clocks may differ; business day boundaries use the airport timezone.

After login, check your name, role and airport/machine scope. An account without an appropriate assignment has no business access. An empty screen after a new installation may be correct: no sample airports or customer records are created automatically.

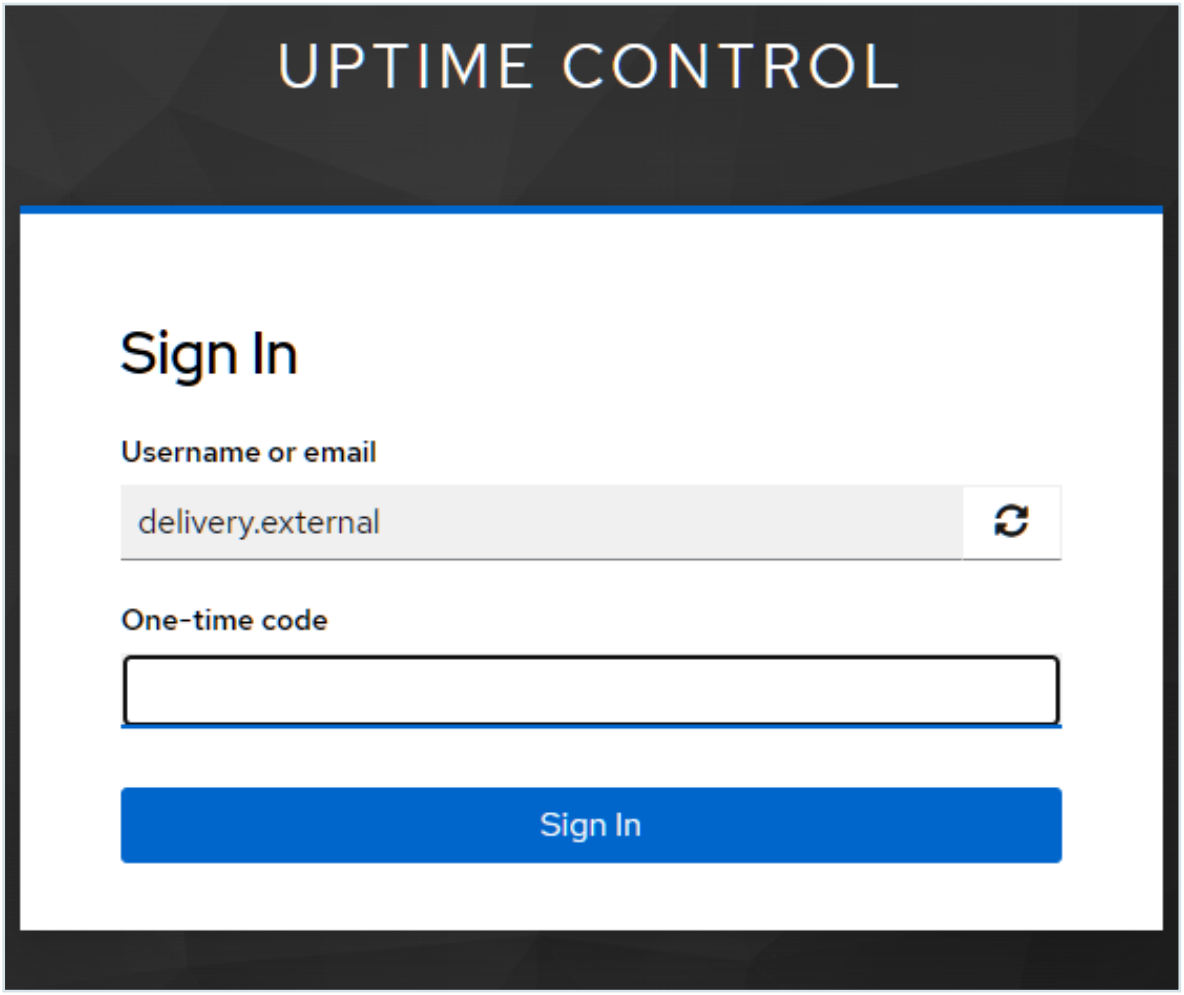
Before saving, check object, period, timezone, content and change reason. Wait for an unambiguous response. After a connection interruption, inspect the list or archive before creating another record. Sign out when finished, especially on shared devices.

Figure 1 | Personal sign-in: use the address and account supplied by your administrator.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

Figure 2 | MFA challenge: enter the current code from your own authenticator; never share it.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

03 Tickets, handover and open faults

In the service workspace, first read existing fault notices for the selected machine. If acknowledgement is required, confirm only after reading.

In the Fault step, deliberately distinguish the same fault, a new fault and not sure. For the same fault, confirm the matching existing record. Not sure creates a need for review and can block official report release until clarified.

Operational: describe the functional check and its result in the work record and confirm the actual restoration time within the intervention interval. Provisionally operational or still out of service: record restrictions, next action and next review time. For further action, also specify current usability.

Where offered, authorized users can take responsibility or offer handover to an eligible recipient. Until acceptance, responsibility remains with the current owner. Do not treat a declined or withdrawn handover as completed.

For unconfirmed transmission, use the offered retry of the same submission. If machine information changed, reconsider the fault relationship. Report urgent faults through the agreed operational route when offline.

The service manager distinguishes technical resolution, evidence review and final closure. Before release, check that related review cases are actually completed and stored service times are correct.

04 Downtime rules for established core calculations

Elapsed time, not person-minutes

Service start and end establish elapsed duration. Two technicians working from 12:00 to 12:10 represent ten elapsed minutes, not twenty downtime minutes. The technician's person-time total must not replace the interval. When timing is incorrect, correct the actual timestamps and their dates rather than forcing an inconsistent total.

Continuous fault exceeding the allowance

For an eligible continuous machine fault, an outage strictly longer than the configured allowance counts from the start. The allowance is not subtracted after it is exceeded. It does not restart at midnight.

Example A: a 24-hour allowance, failure Monday 12:00, restored Tuesday 15:00. Elapsed time is 27 hours. Assuming all 27 hours are eligible operating time, downtime is 27 hours, not three hours.

Example B: a 60-minute allowance and a continuous 120-minute fault give 120 eligible downtime minutes. An interval of exactly 60 minutes does not exceed that allowance.

Repeated instances of the same fault

Separate repeated outages are combined under the repetition rule only when both conditions hold: at least three eligible outages concern the same explicitly linked fault on the same machine and local day, and their combined eligible duration exceeds the allowance.

Example C: 20 minutes, then 40 minutes, then 10 minutes, with a 60-minute allowance. The third event takes the total to 70 minutes; all 70 eligible outage minutes count. Operational gaps between the events do not count.

Example D: three ten-minute events total 30 minutes. With a 60-minute allowance, the repetition rule contributes no downtime. Three twenty-minute events total exactly 60 minutes and also do not exceed the allowance.

Example E: two events of 40 and 30 minutes do not satisfy the minimum count of three. They do not trigger the repetition rule merely because their sum is 70. An individual continuous event exceeding its allowance remains chargeable independently.

Same cause is an explicit relationship

Select the existing matching fault when that is factually correct. Similar descriptions do not automatically link records. A new unrelated fault must not be attached to an old one to change the deduction. If uncertain, request review and provide enough evidence for the service manager.

Boundaries and exclusions

The examples assume eligible operating time and valid machine dates. Operating schedules, report boundaries, planned maintenance and machine lifetime can limit the interval contributing to a report. Overlapping downtime is counted once in the overall total. Cause-level detail may overlap and must not simply be added to reconstruct the total.

A day is defined in the airport's time zone. Around daylight saving changes, a local day can contain 23 or 25 elapsed hours. Set the correct date as well as the clock time for work crossing midnight. Resolve repeated clock times explicitly.

What a correction changes

A corrected current service event can change a newly calculated draft. It does not rewrite a previously released PDF or CSV. A later official issue must follow the versioned release process. Always compare like-for-like report scope, dates, language, rule version and source state.

05 Service walkthrough 1: select the machine and interval

Prerequisites

The service module is available in this edition. Your account still needs permission to record an intervention for the chosen machine. Have the actual start and end, machine serial number, findings and restoration evidence ready.

1. Open Uptime Service. If you are already in the technician workspace, remain there.

2. In Step 1 of 5: Machine, open Machine. Read the airport code, machine code and serial number together. Do not rely on a familiar display name alone.

3. Select the intended machine. Read the displayed time zone. Enter Intervention start and Intervention end as local date and time in that zone.

4. For an overnight repair, set the end to the following date. For a job lasting more than 24 hours, use the actual later date; do not split it into daily fragments to avoid the allowance threshold.

5. If a clock time occurs twice during the autumn change, choose First occurrence or Second occurrence according to the actual event. Do not guess. A nonexistent spring clock time must be corrected from source evidence.

6. Read any current machine notices. Where acknowledgement is requested, confirm only after reading. Acknowledging a notice records awareness; it does not take ownership of the ticket.

7. Compare the selected machine and interval with your source record. End must be later than start. A two-person repair is still one elapsed interval.

8. Choose Continue. If the application reports that the machine information changed, refresh the fault relationship when prompted rather than bypassing the warning.

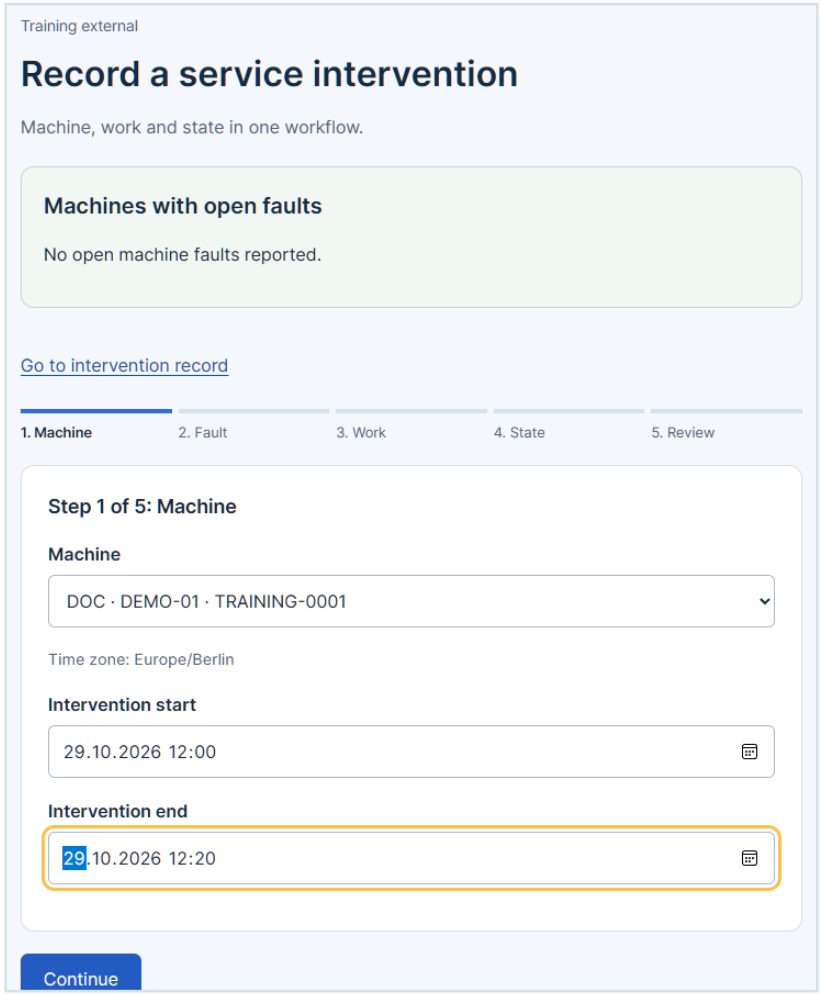
Success check

Step 2: Fault is displayed for the correct machine and interval. If there is no available machine, ask for an explicit assignment. An external technician's assignment is machine-specific.

Practice

In training only, use DEMO-01, 29 October 2026, 12:00 to 12:20. The resulting elapsed duration should be 20 minutes irrespective of how many technicians attended.

Figure 3 | Step 1: use the machine identity, time zone and complete timestamps.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

06 Service walkthrough 2: link the correct fault

1. At Step 2: Fault, read the existing fault information and any previous work before choosing a relationship.

2. Select Yes, the same fault only when this intervention concerns the existing cause. If more than one candidate is displayed, use Confirm the matching fault to choose the correct one.

3. Check the earlier timestamp, original description and last action. Similar wording alone is insufficient evidence.

4. Select No, a new fault when this is genuinely unrelated. This keeps independent faults separate.

5. If the evidence is insufficient, choose Not sure - request review. Do not choose an arbitrary answer merely to keep the official report unblocked.

6. Explain the uncertainty in your findings or work description. Include the physical observation, earlier reference if known, and the question requiring a decision.

7. Choose Continue. Review the next step to confirm that the original fault is shown for a same-fault continuation, or that a fresh description can be entered for a new fault.

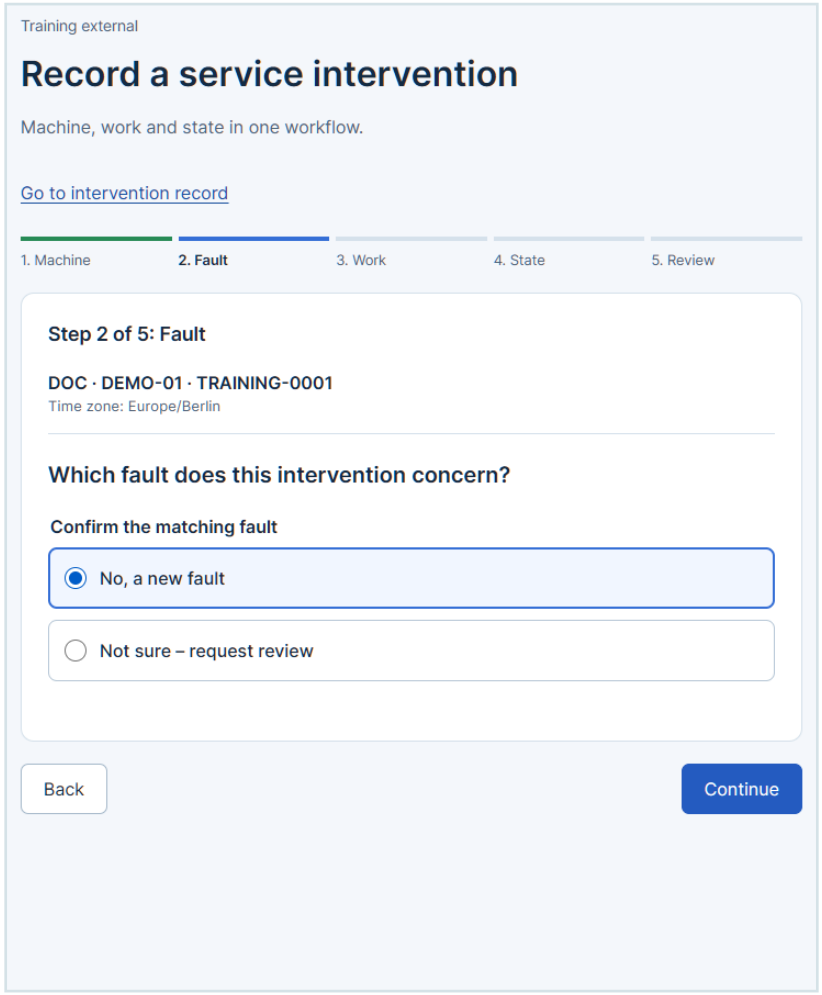
Why this matters

The relationship affects continuity, repetition and later review. Three records with similar text do not automatically become the same fault. A review request can block official release for the affected period until the responsible person resolves it. That is different from a failed service save.

Success check

Your selected relationship matches the evidence. When unsure, the uncertainty is visible for review instead of being concealed in a new unrelated record.

Figure 4 | Step 2: select an evidenced fault relationship; request review if uncertain.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

07 Service walkthrough 3: describe the work

1. In Step 3: Work, choose the factual Cause when entering a new fault. The available categories include Machine fault, Operator error, Passenger interference and Third-party fault.

2. Enter What happened? in factual terms: the affected component, observed symptom and circumstances. Avoid unsupported blame and vague text such as repaired.

3. For an existing fault, read Original fault and Previous work. Record New findings where applicable without rewriting the historical original description.

4. In Work performed, check and result, describe the action taken and the test performed. State the observed result, including any remaining restriction.

5. Separate an observation from a conclusion. For example: drive alarm displayed; connector reseated; three unloaded cycles completed without recurrence.

6. Do not enter passwords, access tokens, private contact details or unnecessary personal data in free text. Use your approved incident reference where sensitive evidence is held elsewhere.

7. Re-read the category and description. Do not reclassify a machine fault to reduce reported downtime.

8. Choose Continue. If a required field is highlighted, complete it with actual evidence rather than filler text.

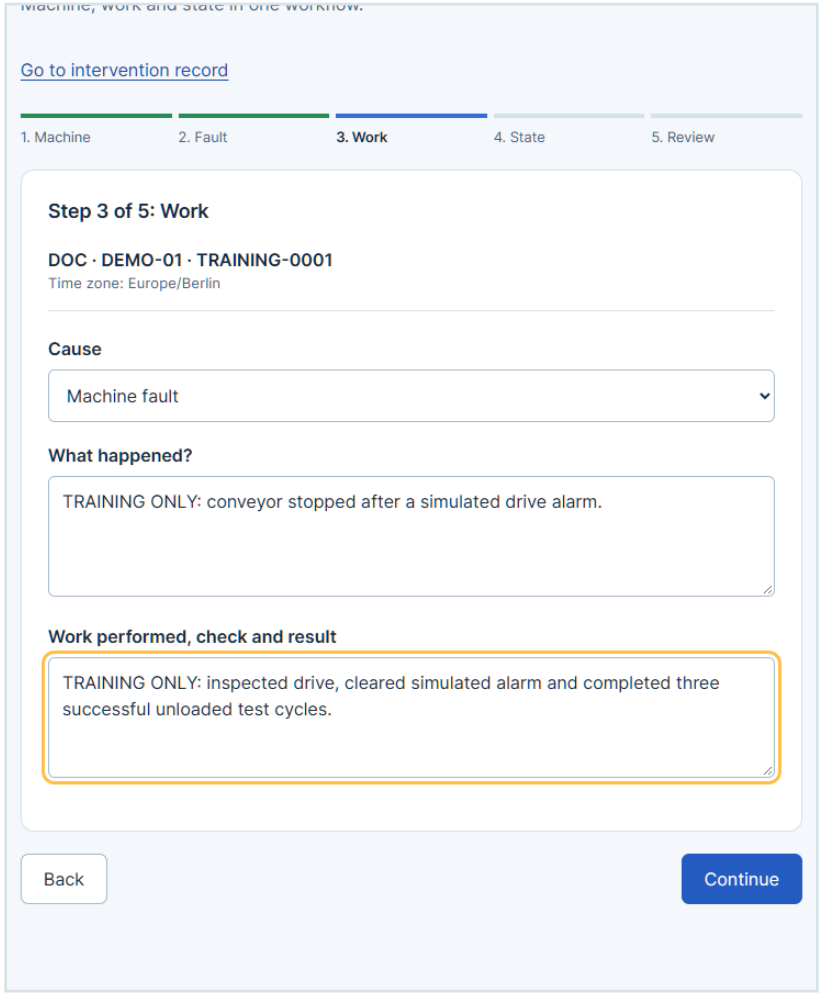
Example of useful work documentation

Observed intermittent drive alarm and conveyor stop. Inspected connector seating and reseated the loose connector. Completed three unloaded test cycles and one supervised loaded cycle with no alarm recurrence. No operating restriction remained at handover.

Example requiring further action

Alarm cleared temporarily, but cause not confirmed. Machine remains isolated. Replacement drive inspection is required; responsible service manager informed. This description must be paired with a truthful non-restored state in the next step.

Figure 5 | Step 3: record cause, observation, action, functional check and result.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

08 Service walkthrough 4: record the resulting state

1. At Step 4: State, answer Is the machine operational after your work? from the physical state after the intervention, not from the fact that your shift ended.

2. Choose Operational only when restoration is supported by your functional check and result. Enter Restoration confirmed at with the actual date and time.

3. For a retrospective entry, do not leave a default current restoration time. It must agree with the recorded intervention interval. If it falls outside that interval, correct the source times or the restoration time according to evidence.

4. Choose Provisionally operational when use is possible subject to a remaining condition. Enter the restriction and next action, plus the next review time requested by the form.

5. Choose Still out of service when the machine cannot be used. Describe the next action and review time. Do not mark Operational simply to remove it from an open-fault view.

6. If Further action required is selected, answer Can the machine currently be used? explicitly. Yes, No and Usability unconfirmed convey different operational states.

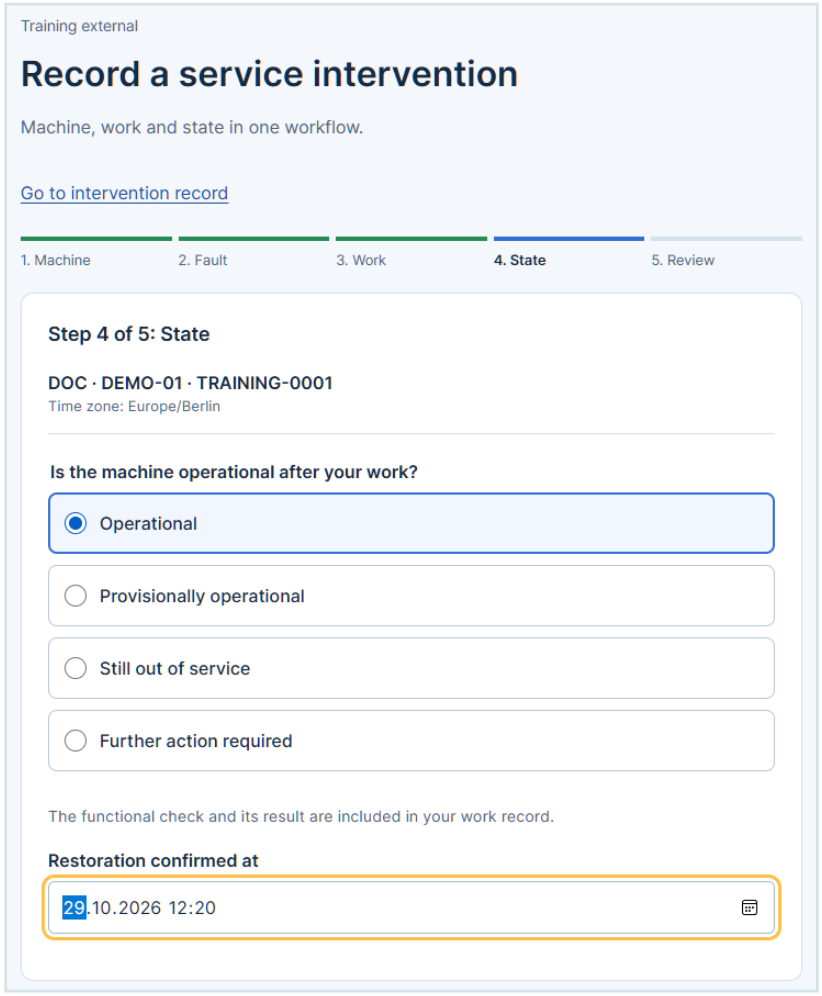
7. Check that the work narrative, usability and status agree. Further work being planned does not by itself prove the machine is down, and a completed visit does not prove restoration.

8. Choose Continue and read the full Review summary.

Success check

The next person can tell whether the machine can be used, what remains to be done and when to review it. For Operational, the restoration time is evidenced and lies within the entered intervention interval.

Figure 6 | Step 4: record the true restoration state and confirmed time.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

09 Service walkthrough 5: review, save and verify

1. At Step 5: Review, compare start, end, matching fault, cause, description, work performed, state and restoration or next-review time against your source notes.

2. Use Back to correct an inaccurate field. Recheck dependent fields after changing the machine or interval.

3. Confirm that the record contains elapsed work times and does not substitute multiplied technician time.

4. Choose Save record once. Wait for the application to confirm the outcome; do not open another tab and submit a second copy while waiting.

5. A successful save states that the service entry and ticket have been saved. Retain the displayed references through your normal work-record process.

6. If functional review is required, note that the record can be saved while official release for the affected period remains blocked. Send the responsible manager the reference and reason for uncertainty.

7. If the response says transmission is not confirmed, use Check submission again for the same submission. Avoid recreating it as a new intervention, which would risk a duplicate.

8. Use Record another intervention only for a genuinely separate record, or finish and sign out.

No connection

The form is not a substitute for your agreed urgent telephone reporting route. A visible unsent form is not a server record. Keep the original work evidence and verify the final reference after connectivity returns. The application should not be treated as a guaranteed offline queue.

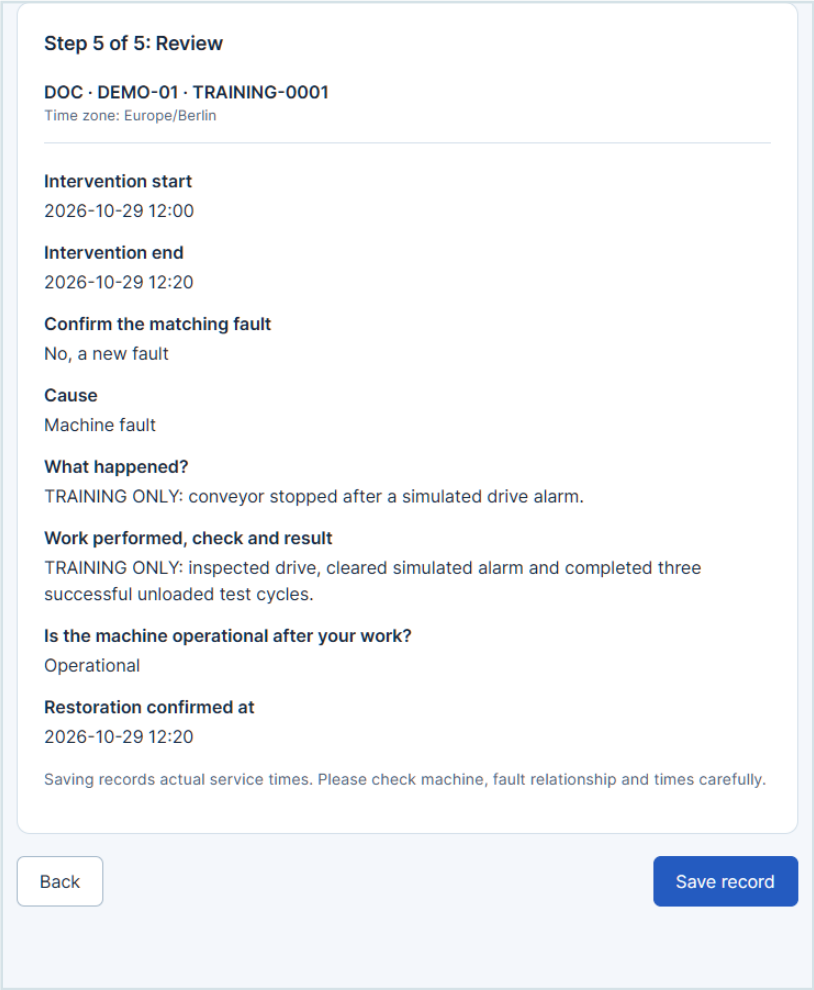
After a mistake is discovered

Send the service manager the service reference, machine, wrong value, correct value, source evidence and reason. External and internal technician roles alone cannot correct the stored service event. Creating another apparently new job is not a correction.

Illustrated boundary

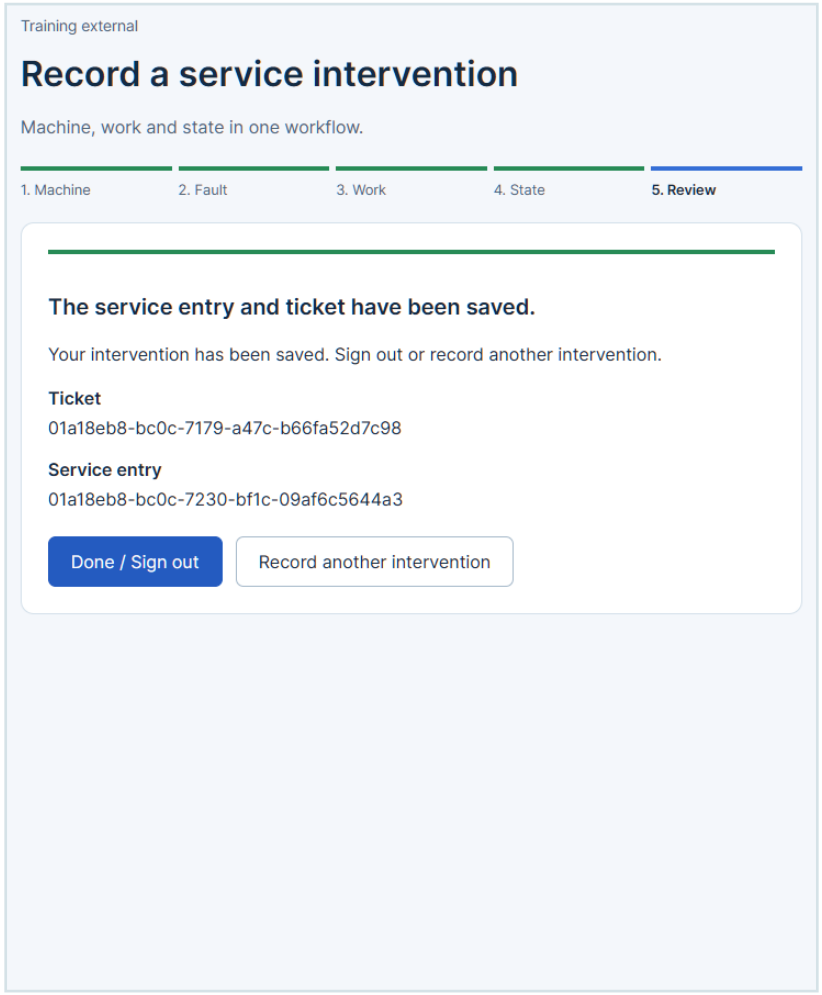
The illustration below shows the review before saving. A synthetic sample was subsequently saved in the isolated training installation to verify the confirmation screen. No customer record was created or changed.

Figure 7 | Step 5: perform the final factual check before Save record.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

Figure 8 | Confirmed synthetic save: retain the ticket and service-entry references.



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

10 Field checklist and escalation examples

Machine and time

Machine: match serial number and airport, not name alone. Start/end: actual local dates and times in the displayed zone. Clock occurrence: resolve daylight-saving ambiguity from evidence. A missing machine is an access or master-data issue; do not substitute another machine.

Fault relationship

Same fault: select the matching existing case. New fault: a genuinely independent cause. Not sure: an explicit review request. Supply evidence to resolve the relationship; do not split a continuous outage into apparently independent cases.

Cause and narrative

Cause: the supported classification. What happened: observed symptom and circumstances. Work performed: action, test and result. Keep free text concise but sufficiently specific for a reviewer who did not attend.

Restoration and follow-up

Operational: confirmed restoration time and successful check. Provisional: restrictions and next review. Out of service: remaining action and review. Further action required: explicit current usability as well as next action. Never substitute an administrative closure for a physical state check.

Escalation packet

Provide the application version if visible, your role, machine reference, relevant timestamp and time zone, record or ticket reference, the action attempted, exact message and whether the save was confirmed. Include a cropped screenshot only if it contains no credentials or unrelated customer data.

Worked handover

A technician records 12:00 to 12:20, still out of service, and a replacement inspection at 14:00. The manager assigns responsibility and checks the next review. A second technician records the continuation against the same fault after reviewing previous work. The first visit is not rewritten to pretend restoration occurred. When the repair is actually successful, the later record documents its check and restoration.

End-of-shift checklist

Check that every completed visit has a confirmation reference, every unresolved machine has a truthful state and next action, and every uncertainty has an owner through the agreed operational process. Sign out of shared devices. Do not assume that a read acknowledgement means another technician accepted responsibility.

11 Troubleshooting decision guide

I cannot see the expected machine

Check your signed-in identity and active scope. Confirm the machine's serial number with the manager. An external account needs an explicit machine assignment. Do not use another asset or shared account to get past the empty list.

A service record is missing from the list

Check the confirmation reference first, then airport, machine, date range and time zone. An overnight interval may appear on a neighbouring local date. Check the current archive or import disposition before resubmitting.

The correction was saved but the old state is visible

Wait for the completion refresh. Reopen the view or reload only after checking that the save completed. Compare the exact event or source-row reference. If the mismatch persists, capture the current message and refer it to support; do not create a duplicate as a workaround.

Review is still open

A saved intervention can legitimately require functional review. Original file issues, current row status, a fault-case review and the report-period status are separate. Locate the precise remaining case and have the responsible person resolve its facts.

The percentage differs from an archived PDF

Compare scope, dates, language, rule version, measured versus rule-based input, service revisions and report version. An archived file represents its released data state; a fresh draft can incorporate later corrections.

A save or download failed

Read the exact message. If saving was unconfirmed, check the same submission before recreating it. If archiving succeeded but downloading failed, retrieve the existing archived file rather than releasing another version.

A permission error occurs

Stop the attempted action and verify the role and scope. A missing permission is not a reason to alter the URL, share an account or disable authentication. Send the administrator the intended task and affected scope.

Support information to retain

Record the time and time zone, application version, role, screen, machine/event/report reference, exact action, exact message, whether confirmation was received and whether the problem persists after reopening the view. Remove secrets and unrelated records from screenshots.

What not to promise

No user-facing success message certifies that every downstream business process is complete. A service save is not physical restoration, a draft is not approval, an official report is not an accounting posting, and a downloaded backup is not a tested restore.

12 Role-specific practice and readiness checklist

Use a designated training environment. These exercises are practice tasks, not evidence that a real customer procedure has already passed.

Exercise 1: Select the right machine

Confirm DEMO-01 by serial and airport, then enter the complete local start/end.

Expected result: The interval belongs to your explicitly assigned machine.

Record the scope, evidence reference and reviewer conclusion. Stop if the expected result cannot be demonstrated.

Exercise 2: Distinguish new and same fault

Read the preceding fault and choose the truthful relationship. Use review if evidence is insufficient.

Expected result: A similar description does not automatically establish a same-fault relationship.

Record the scope, evidence reference and reviewer conclusion. Stop if the expected result cannot be demonstrated.

Exercise 3: Handle an unconfirmed save

Explain what you would do if the network response is unconfirmed.

Expected result: Retry/check the same submission, retain evidence and avoid creating a duplicate. Urgent faults still use the agreed contact route.

Record the scope, evidence reference and reviewer conclusion. Stop if the expected result cannot be demonstrated.

13 Glossary and document control

Scope: the airport or machine covered by your active assignment or selected report.

Effective date: when a business rule or master-data revision applies; it can differ from the time the change was recorded.

Revision: the current or historical state of a source record. It is not the same as an official report version.

Fault case: the explicitly linked cause relationship used to distinguish a continuation from a new fault.

Allowance: the configured threshold for eligible fault duration, not an amount always subtracted after exceedance.

Elapsed duration: real time between start and end, independent of the number of technicians.

Draft: a calculated preview that has not been officially released.

Period closure: confirmation of a particular checked data state before official release.

Official version: immutable archived output with its release information.

Measured availability: availability derived from imported machine measurements.

Rule-based availability: availability calculated against the configured contractual operating basis and relevant service evidence.

MFA: multi-factor authentication; a second factor in addition to the password.

Documentation basis

Application: Uptime Control 2.0.0-alpha.1. Documentation edition: 25 November 2026. Core workflows and historical illustrations are retained from the preceding edition. New V2 procedures are based on the local source and pilot evidence of 21/22 November 2026. This document does not claim a new production or security acceptance.

This documentation does not change software, grant additional rights, certify every possible security condition or replace the installation-specific operating agreement. Screenshots may show a different number of sample records or a browser-dependent date format.

Keep this handbook with the matching software edition. Recheck procedures when the application, roles, contract configuration or identity policy changes.

14 Permissions before the first intervention

Establish responsibility

Administrators manage users and grants. WarehouseManager is assigned to a site; it is not a general technician or report-release role. The responsible service department can also manage inventory within its authorised site. A technician does not automatically receive full warehouse access.

1. Identify the responsible site and machines. Use personal accounts rather than shared logins.

2. Assign the appropriate role and scope in user administration. Assign warehouse managers at site level.

3. Sign in with a training account carrying that role. Only authorised sites and machines should be available.

4. Test one allowed read and write workflow with synthetic data. Check an unrelated site as a negative case: access must be denied.

5. If a machine is missing, check assignment and active status. Do not replace everyday access with an administrator account.

Common messages

No machines assigned: check the account and assignment. Ticket module not enabled: ask administration to check module configuration. No warehouse permission: check role and site scope rather than repeatedly submitting.

Material withdrawal linked to a service record remains tied to the authorised intervention and machine. The warehouse role alone does not grant permission to correct service records or release official availability reports.

15 Service record: machine, times and initial state

Prepare

You need an assigned machine, actual intervention start and end, and the observed machine state. Do not present an estimated downtime start as a confirmed fact.

1. Open the service workspace. Select the machine and compare its identifier and site.

2. Check intervention start and end. Prefilled times are suggestions and must match the actual visit.

3. Use the machine time zone. During a daylight-saving transition, explicitly select the first or second occurrence of an ambiguous local time.

4. Select the initial state: machine stays operational; you stop it because of the fault; it is already down because of the fault; or scheduled maintenance shutdown.

5. For your own shutdown, enter the actual stop time. If already down, state whether the onset is known. Enter an evidenced time when known; otherwise choose Unknown.

6. Select Continue. Resolve required-field and time errors first.

Check the result

Intervention time measures the work. Downtime may begin before the visit or end before the work finishes. The two intervals can therefore differ. An unknown onset requires clarification; a guess must not become a confirmed historical stop time.

Example

Machine down from 08:30, visit 09:00-10:00, restored 09:30: 60 minutes of work and 60 minutes of actual downtime before application of the evaluation rule.

16 Repeat interventions and the original fault

1. Read the existing notices and interventions after selecting the machine.

2. Choose Yes, the same fault; No, a new fault; or Not sure - request review.

3. For the same fault, explicitly confirm the appropriate original record. A shared date or machine does not prove a shared cause.

4. Add new findings. Do not replace the original description with an invented new fault.

5. If uncertain, allow a review case to be created and inform the service manager. Official release for the affected period waits for clarification.

Common mistake

A machine was restored and fails again later. Do not select a new fault solely because it happened later: the confirmed causal relationship matters. Conversely, two unrelated causes do not automatically form one continuous outage.

Concurrent changes

If the machine context has changed, review the current relationship again. The designed response preserves your text. Submit only after reviewing; do not open a second browser to bypass the check.

17 Fault code and guided procedure

1. Copy the displayed fault code exactly. For a known code, compare the message, component/sensor group and installation position.

2. If machine, message or position does not match, clarify the mapping with the service manager. The procedure is guidance, not a substitute for safety authorisation at the machine.

3. With no code or an unknown code, manually choose an appropriate published route. Do not invent a similar code.

4. Perform the displayed work instructions in order. Select answers only after carrying out the actual check.

5. Your answer leads to the next step or a final action. Confirm only work actually performed.

6. If the template changes during entry, select the procedure again when prompted. Do not combine old and new template revisions.

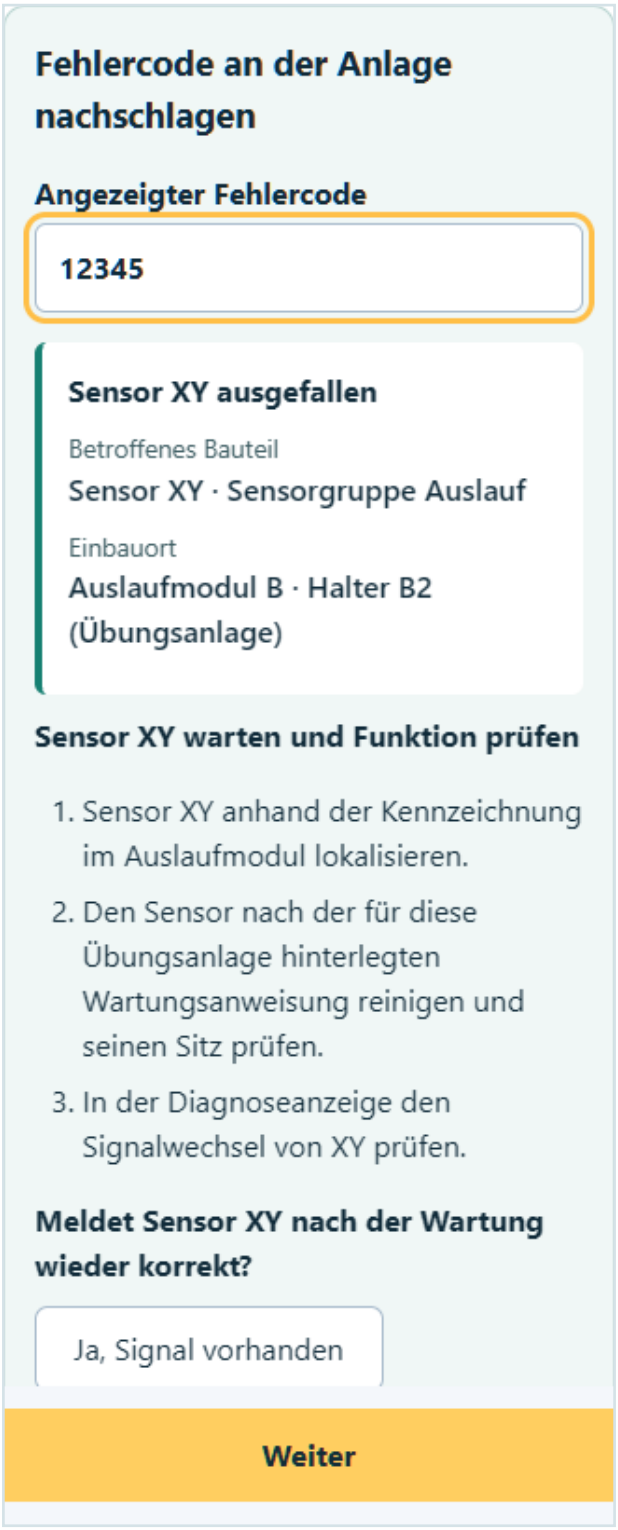
Example

Training code 12345 maps to sensor XY. Compare its location and message, perform the prescribed test and choose the observed result. The code alone does not prove the sensor must be replaced.

Check

The review includes the selected procedure. Before saving, ensure the selected answers agree with your observations.

Figure 9 | Fault code and guided procedure



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

18 Spare parts in the service record

1. After following the procedure, inspect the spare parts allowed for the final action. Compare part number and description.

2. Choose the actual warehouse location and quantity withdrawn. Stock at another location is not stock at the selected location.

3. Do not record a reservation as a withdrawal. Confirm only material actually taken for this intervention.

4. In the final review, check item, quantity and location. Changing the procedure can invalidate an earlier parts selection; review it again.

5. After a successful save, inspect the service record and related stock movement. If transmission is unclear, retry the same submission rather than creating another withdrawal.

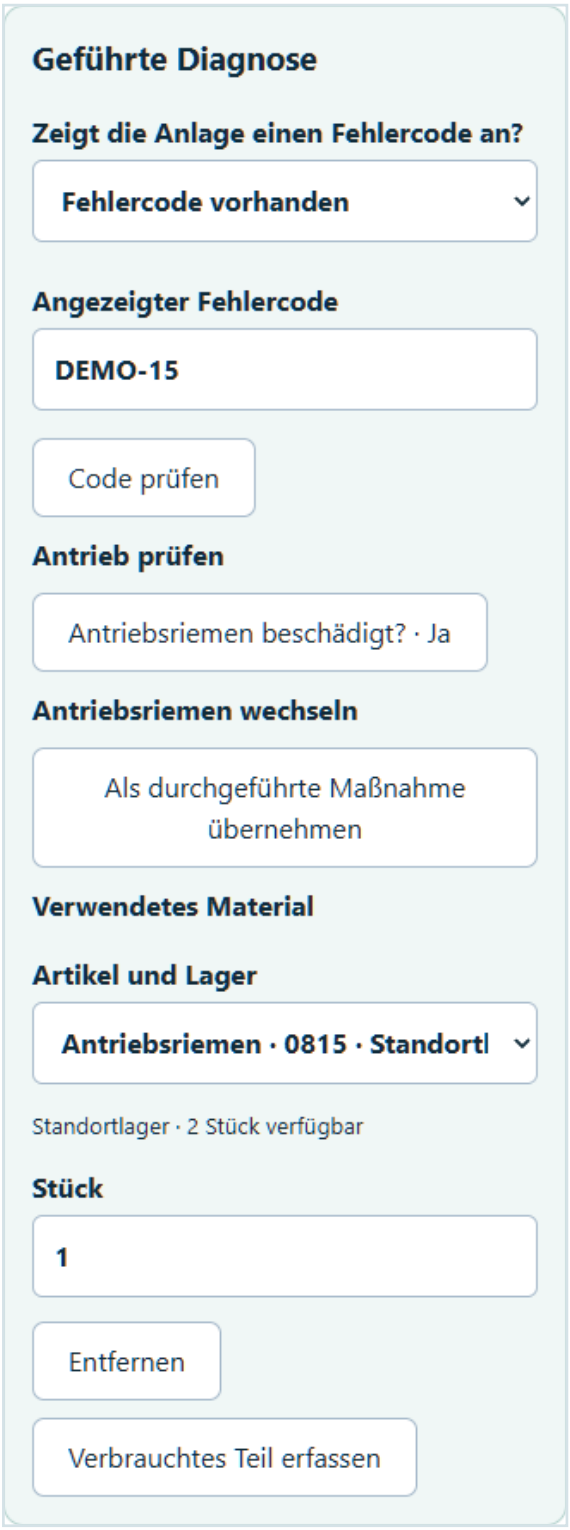
Insufficient stock

After rejection, reload the current quantity and consult warehouse staff. Do not use a negative quantity or a false location as a workaround. If stocktaking locks the location, wait for release or clarify the actual permissible material route.

Returns

Return unused material already posted through the authorised warehouse function, referencing the original withdrawal. A return is a new traceable transaction; do not delete the original evidence.

Figure 10 | Spare parts in the service record



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

19 Final state, restoration and saving

1. Record work performed and the functional check with its result. A bare “done” does not explain the intervention.

2. Explicitly select Operational, Provisionally operational, Still out of service or Further action required.

3. For an operational machine, confirm the actual restoration time. This ends the recorded outage; the work may finish later.

4. If further work is needed, enter the next action and review time. For Further action required, also confirm whether the machine is usable, not usable or its usability is unconfirmed.

5. On Review, read machine, times, initial state, cause, original fault, procedure, parts and final state together.

6. Select Save record. Wait for the confirmation that the service entry and ticket have been saved, and retain the displayed references.

Calculation example

Visit 09:00-10:00, machine stopped at 09:00 and restored at 09:20: 60 minutes of work but 20 minutes of downtime before contractual evaluation. Work duration is not automatically downtime.

Unconfirmed transmission

Use Check submission again for the same submission. Do not create a replacement while the original result is unknown. Without connectivity, use the agreed telephone route for urgent faults; a local draft does not notify service management.

20 Separate scheduled maintenance correctly

1. For a planned shutdown, select Scheduled maintenance shutdown. Do not rename a real fault as maintenance.

2. Check intervention and shutdown times. Describe maintenance work and the functional check specifically.

3. Confirm final state and actual restoration just as for other interventions.

4. Before saving, verify that the record is still classified as maintenance.

5. In evaluation, distinguish maintenance time from fault-related time. Pure scheduled maintenance must not be treated as a fault alarm without a factual basis.

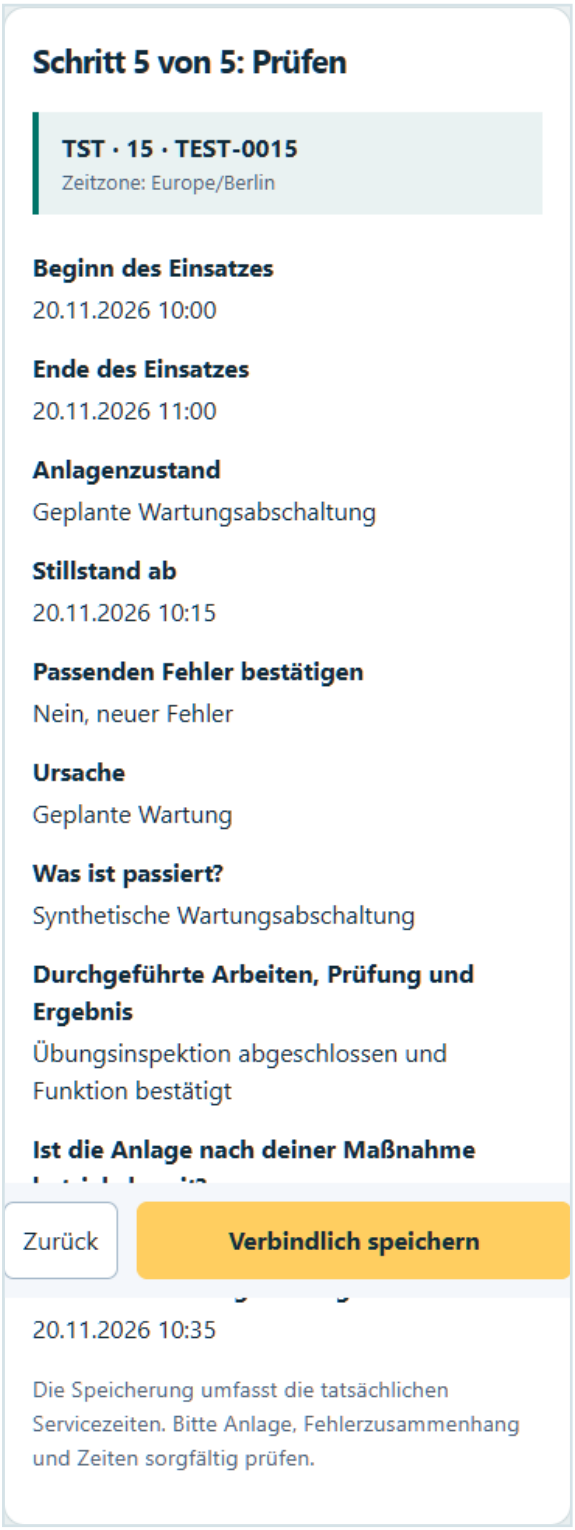
A fault discovered during maintenance

Record the observation and its time clearly. Ask the responsible service manager to review the distinction instead of assigning the whole duration to one cause automatically.

Check

Carry the maintenance classification through the subsequent review. A successful functional check does not replace an accurate timestamp; both are required.

Figure 11 | Separate scheduled maintenance correctly



Synthetic training data. V2 captures: 21/22 November 2026; other images: previous-edition core workflows. Some V2 screens retain German labels; the chapter explains their English meaning.

21 End-to-end exercise and acceptance

Use an approved test site with synthetic data. Do not accidentally perform this exercise against production stock.

1. Administrator: verify site, machines, users and roles. A user without site permission must not edit the data.

2. Warehouse: create a test article, receive five items and print a label. Check stock and journal.

3. Technician: record a service event for an already stopped machine. Keep outage onset separate from your own working time.

4. Guided path: use a known fault code, answer the questions and assign a test part actually used.

5. Completion: document the functional test, record restoration time and save. Stock must match the physical issue.

6. Service lead: trace event, downtime, working time and any outstanding review. Separately test a follow-up case with a review deadline.

7. Warehouse: test a referenced return and partial delivery. Check stock and outstanding order quantity.

8. Stocktake: lock the location, count all articles, investigate a deliberately introduced difference, complete and export CSV.

9. Counter-check: cancel a second stocktake. It must not post a difference and the location must become available again.

10. Operations: check sign-out, sign-in, MFA and the agreed backup. Record date, role, expected and actual outcome.

Acceptance boundary

This exercise is a template, not an already signed customer acceptance record. The actual installation, physical devices, printers, cameras, permission assignments and operational approvals must also be checked.