

On-demand e-evolve testing at home:

Instructions for remote invigilation

Version 1.6, February 2021

For the period of:

September 2020 – Summer 2021

Document change history

This is version 1.4 of the City & Guilds e-volve Tests at Home: instructions for remote invigilation. This version replaces all previous and it is the centre's responsibility to ensure that all staff involved in the provision of City & Guilds qualifications and/or assessments familiarise themselves with this version of the document.

This document is subject to revision and maintained electronically. Electronic copies are version controlled. Printed copies are not subject to this control.

Version	Change details
Version 1.6	Requirements for photographic ID updated It is now possible to use Zoom.
Version 1.5	Added statement on virtual meeting technology
Version 1.4	Surpass Viewer is now required for web delivery.
Version 1.3	The scope of the document has been amended and the order has been changed, to clarify the responsibilities of: <ul style="list-style-type: none">• the centre;• the candidate; and• the invigilator on the day of the test. New section added - Equipment and resources Additional guidance on positioning the camera added. Microsoft Teams can now be used.
Version 1.2	Amended the scope of this document, so it includes other on-demand e-volve tests, not just EPA. The candidate's tutor or assessor cannot be the invigilator. The candidate is not permitted to leave the room during a test.
Version 1.1	Additional detail added

Contents

Introduction	3
1 Requirements for centres	5
1.1 Application for the centre to use remote invigilation	5
1.2 Preparing candidates for the test	5
1.3 Invigilators	5
1.4 Access arrangements	5
1.5 Scheduling the test	6
1.6 Centre records	6
1.7 Exam Audits	7
2 Requirements for candidates	7
2.1 Requirements for remote invigilation	7
2.1 The room used for the test	8
2.2 Surpass Viewer	8
3 Instructions for remote invigilation	9
3.1 Before the exam	9
3.2 Equipment and resources	9
3.3 Security checks to complete before the test	10
3.4 Identification	11
3.5 Starting the test	12
3.6 During the test	12
3.7 Entering and leaving the room	13
3.8 Malpractice	13
3.9 At the end of test	13
4. Technical requirements and support	15
4.1 Using web delivery for e-volve exams – frequency asked questions	15
4.2 Virtual meeting technologies	16
4.3 Bandwidth/ connection	23
Glossary	24
Checklist for invigilators	25

Introduction

This document provides instructions for centres on testing at the candidate's home and remote invigilation for end-point assessment (EPA) and other specified on-demand e-volve tests.

It should be used in conjunction with the following documents, as outlined below:

Document	Qualifications it applies to
End-point Assessment Invigilation instructions for on-demand e-volve tests	End-point assessment
JCQ Instructions for conducting examinations	Other on-demand tests where remote invigilation is permitted

When is remote invigilation permitted?

Remote invigilation is permitted for some qualifications, as a form of adaptation. Please refer to the [sector guidance on our website](#) for details of qualifications where this is permitted.

Remote invigilation is **not** permitted for the following:

- Technicals or any other dated e-volve tests,
- Level 2 award in MOT testing or the level 3 award in MOT test centre management (3428),
- Streetworks (6167),
- Level 2 Health and Social Care: Core (8040-02)

This list is kept under review and is subject to change. For Functional Skills and Essential Skills Wales, please refer to the tests at home centre guide for those qualifications.

What is remote invigilation?

This is where an e-volve test is carried out at the candidate's home (or other chosen location) with a remote invigilator, using an appropriate online screen sharing software or application (referred to as virtual meeting software in this document). The invigilator must be trained according to the requirements of the relevant document listed above.

The system must allow the invigilator to be able to view the candidate, their environment and their computer/laptop screen at all times during the test. The test must be completed under exam conditions.

Remotely invigilated e-volve tests are delivered through a web-delivery application requiring no installation to the candidate computer. Remote invigilation is not permitted for any dated e-volve tests or any paper tests at this time.

General requirements

Under no circumstances may live assessment materials, or any of their contents, be used for any purpose other than for live assessment. This includes use as practice material or as teaching/learning resources.

The test session or contents **must not** be recorded or saved in any other way.

The head of centre has ultimate responsibility and accountability for ensuring that tests, under the jurisdiction of that centre, are conducted:

- securely;
- confidentially; and
- in accordance with the instructions set out in this document.

Compliance with these instructions

Centres must ensure that all tests are conducted in compliance with these instructions. Failure to do so could constitute maladministration or malpractice, which may result in:

- invalidation of candidate results;
- withdrawal of qualification or centre approval;
- communication of malpractice to other awarding organisations offering the qualifications and to the relevant regulatory authorities.

For more information, please refer to City & Guilds document [*Managing cases of suspected malpractice in examinations and assessments*](#).

1 Requirements for centres

1.1 Application for the centre to use remote invigilation

- 1.1.1 The centre will need to apply to use remote invigilation for qualifications they are approved to deliver. The chosen qualifications and predicted candidate numbers **must** be provided on the application form. The centre **must not** use remote invigilation for any other qualifications or exams.
- 1.1.2 The e-volve web delivery URL will be provided by City & Guilds, which allows the centre to start delivering tests.

Please note: the City & Guilds centre contract applies to the provision of the e-volve Tests at Home service.

1.2. Preparing candidates for the test

- 1.2.1. It is the centre's responsibility to identify candidates who can take their test(s) through remote invigilation. Before each test, the centres must ensure the candidate:
- is suitably prepared for the test (and has completed a navigation test where required);
 - has all the required equipment and materials.

1.3. Invigilators

- 1.3.1. Invigilators are responsible for ensuring that the test is conducted securely and in line with these instructions. It is the responsibility of the head of centre to ensure that appropriately trained invigilators are available for all tests and that they meet all requirements.
- 1.3.2. All tests using this approach must be invigilated on a one to one basis. The same person cannot invigilate more than one candidate at a time.
- 1.3.3. The invigilator **must** supervise the candidates throughout the test and give complete attention to this duty at all times.
- 1.3.4. Invigilators **must not** carry out any other task while they are invigilating.
- 1.3.5. The candidate's tutor or assessor cannot be the invigilator for the test.
- 1.3.6. Relatives, friends and/or peers of candidates **must not** be the invigilator for the test.
- 1.3.7. The invigilator must check the candidate's identification before they start the exam.

1.4. Access arrangements

- 1.4.1. Access arrangements **must** be agreed before a test takes place. These allow a candidate with special educational needs or disabilities to:
- access the test; and
 - demonstrate their skills and knowledge without changing the demands of the test.

It is a centre's responsibility to request access arrangements on behalf of candidates and these must be agreed and in place before candidates sit a test. For more information, please refer to the 'Access Arrangements and Reasonable Adjustments' section of the City & Guilds website at www.cityandguilds.com/policy.

1.4.2. For some access arrangements, a person is required to facilitate, e.g. a reader or scribe. This person must be familiar with the invigilation requirements in this document. The invigilator can also act as the reader or scribe. They **must not** be the candidate's relative, friend or peer.

1.4.3. If the candidate is using any assistive software, they should practice using this in advance with a navigation test to make sure it is compatible.

1.5. Scheduling the test

1.5.1. Tests must be scheduled on the Walled Garden, as normal, by the centre. The keycode can then be given to the invigilator, the candidate will need this to unlock the test.

1.5.2. A navigation test should also be scheduled and used to check the candidate is familiar with the software and to check their equipment. For more information, please refer to section 2.10 in e-volve FAQs on the City & Guilds website [here](#).

1.5.3. In advance of the test, the invigilator must send the candidate an appointment, with **all** of the following:

- details of the online screen sharing (virtual meeting) software that will be used for the test;
- the equipment and materials they will need;

The invigilator should send the appointment at least two days before the test and ensure it allows enough time for the checks to be completed before the test session.

1.6. Centre records

1.6.1. The centre must keep records:

- of which candidates have completed a test at home (or other chosen location);
- that they have checked candidate's ID;
- that the candidate was aware of the exam conditions;
- that the candidate has confirmed the test is in their name;
- if there were or interruptions during the test.

- 1.6.2. City & Guilds has provided an invigilator checklist for centres to use. This should be completed by the invigilator on the day of the exam and then submitted to the Exams Officer.
- 1.6.3. The centre must keep a copy of the completed invigilator checklist until six months after the exam date (unless there are any outstanding appeals, malpractice investigations or other results enquiries, in which case the centre must retain the plan until they are concluded).
- 1.6.4. Under no circumstances should the exam be recorded on video.

1.7. Exam Audits

City & Guilds reserves the right to complete exam audits to check centres are following the instructions in this document. This would include observing a remotely invigilated test as a third attendee in the virtual meeting session.

2 Requirements for candidates

2.1 Requirements for remote invigilation

- 2.1.1 The centre will then need to check the candidate's equipment meets the minimum technical requirements as detailed below to allow them to access and deliver tests in web-delivery mode. This should include a general check that all equipment is plugged in or fully charged if battery life is required to complete the test session.
- 2.1.2 The invigilator **must** ensure that all equipment required for the test is ready and available to the candidate prior to the test beginning. These technical checks should have taken place before the test date to ensure access is possible.
- 2.1.3 The candidate will need a laptop/computer with the following features:
- screen resolution at least 1024x768;
 - OS Windows 7, 8, 8.1 and 10 (Mac/Tablet/Chromebooks are not compatible);
 - Surpass Viewer (see below for details);
 - operational web camera that can face them;
 - Access to the preferred virtual meeting technology (for more information refer to section 4.2, on page 16).
- 2.1.4 The candidate will also need:
- a smart phone or tablet with an operational web camera;
 - an email account;
 - photographic ID.
- 2.1.5 For more information on advised virtual meeting technologies, please refer to section 4.2, on page 16. The section provides clarity on the most commonly used meeting technologies and their suitability and acceptability for use with one-to-one remote invigilation of our online tests. This document should be considered in conjunction with your organisational policies for use of software and technical support.

- 2.1.6 For some tests, specific equipment or materials may be required, the invigilator must be sure the candidate has access to these.
- 2.1.7 The candidate can use scrap paper in the test and so the invigilator should make sure the candidate is aware this is permitted.
- 2.1.8 If the test requirements are unclear, the centre **must** check with City & Guilds before the test begins. If any candidate has access to equipment or materials that are not permitted, that could affect the validity of their results.

2.1 The room used for the test

- 2.1.1 The centre must instruct the candidate to pick a suitable room to complete the test, it must be well lit, quiet and private. No one else is allowed into the room during the test.
- 2.1.2 The centre must instruct the candidate to remove anything from the room that might help with answers in the test. The candidate must tell the invigilator about any item that cannot be removed.
- 2.1.3 The room needs to provide the candidate with appropriate conditions for taking that test. The candidate should consider conditions such as heating/ventilation, lighting and the level of noise.

2.2 Surpass Viewer

To enable candidates to access e-volve exams with Flash after 1 January 2021, they need to download and install the new Surpass Viewer.

Surpass Viewer is a custom browser (like Chrome or Internet explorer etc) but with a stable, supported version of Flash embedded within. This version of Flash is supported by Harman until 2023 which means it is less susceptible to the wider browser-based security risks associated with Flash. Also, Surpass Viewer can only access websites which have been predefined by City & Guilds to only allow access to the e-volve platform.

If you experience any issues while sitting practice assessments via the Surpass Viewer, please contact Customer Services.

More information about the Adobe/Harman partnership can be found [here](#).

Download and install Surpass Viewer [here](#).

3 Instructions for remote invigilation

3.1. Before the exam

- 3.1.1. At start of session, both the candidate and the invigilator join the meeting, using the chosen virtual meeting software.
- 3.1.2. The following steps **must** then be completed:
 - The candidate must share their screen on the computer they are using for the test.
 - Both the candidate and invigilator must enable their webcams and microphones.
 - The candidate needs to also join the meeting with their smart phone or tablet, with the webcam enabled.
- 3.1.3. The candidate should close all other programs, applications and websites and not open any unless asked to do so by the Invigilator. The candidate needs to ensure they do not receive any pop-up notifications during the test and so this feature should be turned off.
- 3.1.4. The invigilator must ask the candidate to remove their watch and place it on their desk.

3.2. Equipment and resources

- 3.2.1. Invigilators **must** ensure that all equipment required to facilitate the test is ready and available to the candidate prior to the test beginning.
- 3.2.2. Invigilators should ensure candidates do not have any unauthorised equipment with them in the exam room. This includes MP3/4 players, smartwatches and wrist watches which have a data storage device or access to the internet.
- 3.2.3. If a candidate has brought any unauthorised equipment into the room, these must be removed from the room before the start of the test.
- 3.2.4. Any pencil cases must be see-through.
- 3.2.5. Any food or drink brought into the exam room must be free from packaging and all labels **must** be removed from drink containers.
- 3.2.6. Where an invigilator sees a candidate with any unauthorised equipment once the test has begun, they should pause the test and ask the candidate to remove it from the room. If an invigilator has any concerns that unauthorised equipment has been used to unfairly advantage a candidate, this must be reported to City & Guilds, clearly identifying which candidate(s) are affected.
- 3.2.7. If the exam requirements are unclear, the centre **must** check with City & Guilds before the exam begins. If any candidate has access to equipment or materials that are not permitted, that could affect the validity of their results.

3.3. Security checks to complete before the test

3.3.1. Invigilator needs to check the candidate does not have access to any unauthorised materials.

3.3.2. The invigilator must tell the candidate to scan room with smart phone/tablet, until they are satisfied they have covered the whole room (fig 1). This should include checking (fig 2):

- the area behind monitor;
- for any sort of audio device that the candidate is wearing (hearing aids are permitted);
- the area around computer is clear;
- any scrap paper is blank.

3.3.3. If the invigilator identifies any unauthorised materials or equipment, they must ask the candidate to remove them from the room. If they are unable to remove them, they must be covered for the duration of the test.

3.3.4. After the check has been completed, the invigilator must ask the candidate to stand their phone or tablet in a location that gives as wide an angle of their workspace as possible. The invigilator should be able to see the candidate, their workspace and the door (fig 3).

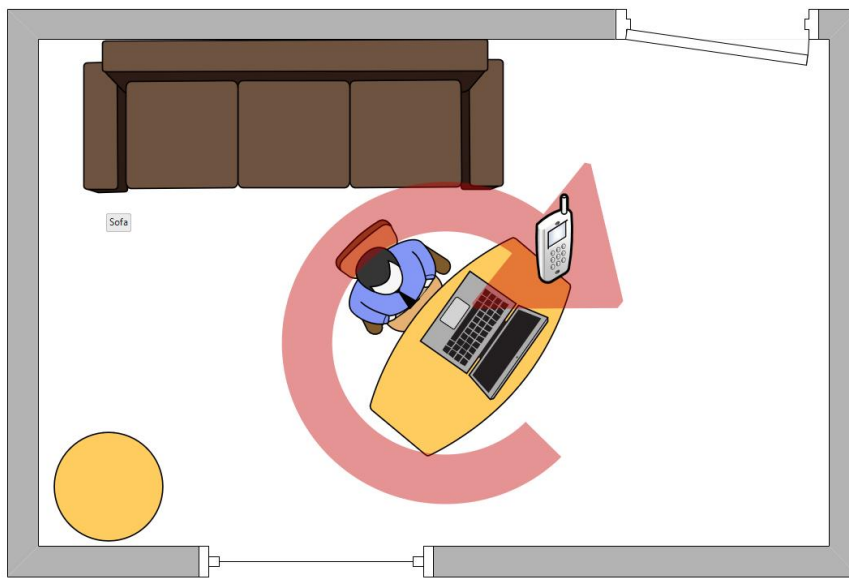


Fig 1

3.3.5. The invigilator must ask the candidate to confirm they will not be interrupted during the test and that no one else will enter in the room.

3.3.6. The invigilator should ask the candidate to confirm they understand the requirements of the test and that they are now under exam conditions.

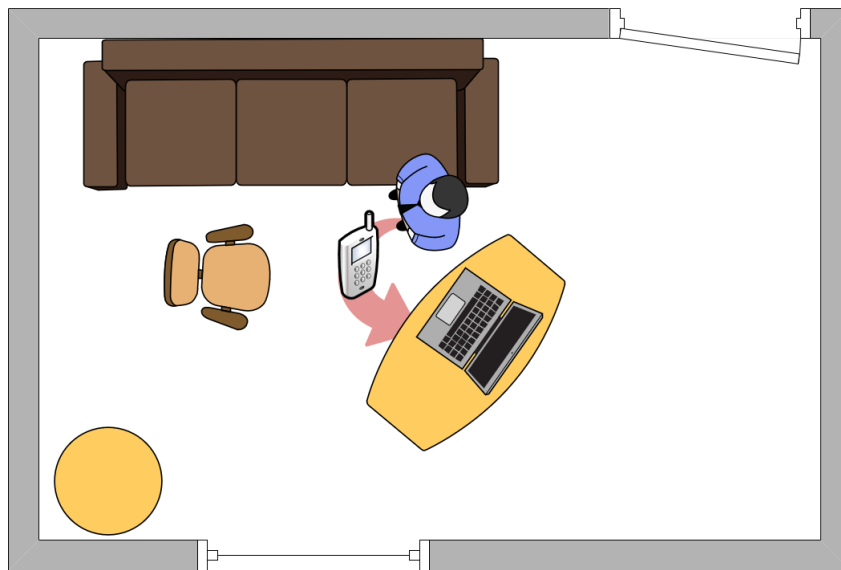


Fig 2

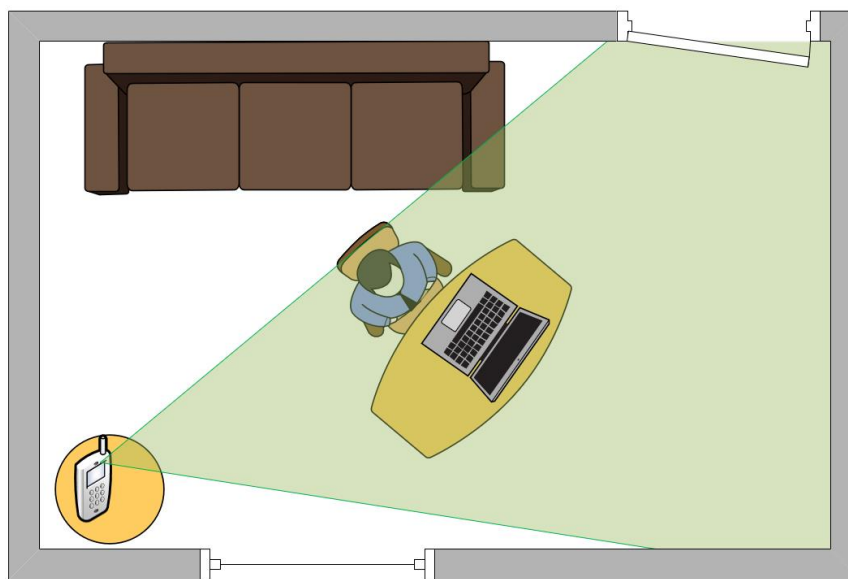


Fig 3

3.4. Identification

3.4.1. For each test, the invigilator **must** confirm the identity of the candidate prior to them sitting the exam.

3.4.2. The invigilator must ask the candidate to hold photographic ID up to the camera to verify their identity. Examples of suitable photographic ID include:

- passport;
- driving licence; or
- centre or employee ID badge.

- 3.4.3. Other types of photographic ID can be used, providing:
- this is agreed by the centre before the exam,
 - it allows the invigilator to accurately verify the candidate's identity.
- 3.4.4. The candidate can only start the test where the invigilator has confirmed their identify. If a candidate sits a test in another candidate's name (whether it is intentional or not), this constitutes malpractice and **must** be reported to City & Guilds immediately.

3.5. Starting the test

- 3.5.1. The invigilator should then confirm candidate is ready to start the test. If they are, the invigilator should then provide the URL for the test
- 3.5.2. After the candidate has clicked on the link, they should check they can see the full test screen. It is possible to zoom out using the browser, which may be useful if the candidate has any difficulty accessing the bottom of the screen.
- 3.5.3. When the candidate is ready, the invigilator should instruct them to enter the keycode for the test.
- 3.5.4. The candidate will then confirm their details and if incorrect, they need to alert the invigilator.
- 3.5.5. The candidate should then be asked to enter the PIN to begin the test.
- 3.5.6. The candidate can then press start to launch the exam.
- 3.5.7. The invigilator should turn off their camera and microphone, but the candidate's must remain on, so the invigilator can supervise them during the test.

3.6. During the test

- 3.6.1. The invigilator must watch the candidate continuously during the test. The invigilator should watch out for candidate looking at a certain point in the room, as this may indicate they are looking at unauthorised materials.
- 3.6.2. If the invigilator suspects the candidate of any malpractice during the test, then they can ask the candidate to pause their test by closing their browser window and then scan the room a second time. When the invigilator is satisfied the candidate does not have access to any unauthorised materials, they should instruct the candidate to restart the test.
- 3.6.3. It is reasonable to expect that during any remote invigilated session, there will be short breaks or stutters in audio/video (minor interruptions) of 1-2 seconds in length. There may be a small number of these events across a test session. This will be largely due to local network usage, stability, and sharing conditions. The invigilator should consider if this could be infringement where:
- A series of minor interruptions persist over a significant period (10 minutes or more).
 - A minor interruption repeats on a significant basis (more than 5 times over the duration of the test).
 - It is suspected that the interruption may be deliberate.

- There is a full disconnection of both cameras and audio for more than 5 minutes or where less than 5 minutes, a suitable explanation (power cut, router crashed, etc) cannot be provided by the candidate.

In all events, the invigilator should try to confirm that the issues are not from within their equipment and must record all such events (including time and duration) on the invigilator checklist (see section 1.6 for more information).

3.7. Entering and leaving the room

- 3.7.1. Candidates are not permitted to leave the room temporarily.
- 3.7.2. If the candidate leaves the room, the test should be stopped and a new test should be booked.

3.8. Malpractice

- 3.8.1. The invigilator must be vigilant for any potential candidate malpractice. For further information on managing suspected malpractice, please see section 4 of the ***City & Guilds Managing cases of suspected malpractice in examinations and assessments*** document, available on the City & Guilds website.
- 3.8.2. The centre **must** inform City & Guilds within 10 working days where malpractice is suspected.
- 3.8.3. In cases of suspected of malpractice, invigilators must warn the candidate(s) that City & Guilds will be informed and that this may lead to their results being invalidated.
- 3.8.4. If invigilators find candidates using unauthorised equipment or materials, they should ask the candidate to remove the unauthorised materials from the room for the duration of the test. Candidates should then be allowed to complete the test.

Where unauthorised equipment or materials have been used during the test, City & Guilds **must** be informed. The malpractice notification forms are available on the [City & Guilds website](#).

3.9. At the end of test

- 3.9.1. When the candidate is done they will confirm so with the invigilator, they can then select 'Finish' and confirm they wish to submit the test. They will then see a blank screen.
- 3.9.2. The invigilator should turn their microphone back on and confirm the test is closed and let the candidate know they are no longer under exam conditions.
- 3.9.3. Any scrap paper used by the candidate during the test must be thrown away.
- 3.9.4. At the end of every test, the centre must check it has been submitted correctly by checking it has green tick in the invigilation tab on Secure Assess.

3.9.5. For multiple choice exams, with instant provisional results, the centre can go to results tab of Secure Assess and download the candidate's score report. This can be emailed to the candidate. For examiner marked exams, results will be available within 20 working days.

4. Technical requirements and support

4.1 Using web delivery for e-volve exams – frequency asked questions

4.1.1 What is Web delivery?

Web delivery allows you to take e-volve exams in Surpass Viewer without the SecureClient software.

4.1.2 Do I need Flash player to use Web delivery?

No, Flash is built into the Surpass Viewer.

4.1.3 Can the exam be downloaded to take offline?

No, the web delivery link only replicates the exam delivery aspect of SecureClient and does not allow for exam data to be stored locally to be taken offline.

4.1.4 What happens if I lose internet connection during my exam?

As the exam is being completed directly on our server if you lose internet connection you will receive an error message and will need to refresh the page and re-enter the keycode once the internet has been restored. While an exam is disconnected the timer will freeze on the server until the exam connection is regained. The candidate's progress will have been saved from the point the last question was answered.

4.1.5 What happens if Surpass Viewer or computer crashes/closes during the exam?

If Surpass Viewer has closed or the computer crashes the exam will enter a disconnected state. While an exam is disconnected the timer will freeze on the server until the exam is connected to again. If the Surpass Viewer has accidentally been closed when re-entering the keycode you may receive a message saying the exam is still in progress and it will just take a minute or two for the server to realise it has been disconnected, then the keycode can be re-entered.

4.1.6 Do I still need to set a PIN or unlock the exam through the invigilation tab?

Yes, the invigilation functions of SecureAssess will function as normal and you will need to follow your normal process at the start of the exams.

4.1.7 Can I use my ChromeBook/ Mac/ Ipad/ Android tablet?

Only Windows operating systems are supported. Web delivery may function when using MacOS or other systems however the way they display questions or format the exam could lead to errors and this is not supported.

4.1.8 Can I use Chrome/ IE/ FireFox/ Edge/Safari?

No, Surpass Viewer must be used.

4.1.9 What do I do if there is technical issue during an exam?

You should call the e-volve customer services team directly on 0844 543 0000. The exam can be paused, where possible, and re-started if/when the issue is resolved.

4.2 Virtual meeting technologies

All online meeting solutions are owned and/or provided by third parties, and not by City & Guilds. We have no control over the content or functionality of, and have no responsibility for, any online meeting solution or any other third-party software, internet browser, product or service referred to in this document (together the “technologies”).

This document is provided for information only to clarify how such technologies may be correctly used so as to meet City & Guilds’ minimum requirements for the invigilation of remote on-screen assessments. As such, we strongly recommend that any party intending to use the technologies from time to time independently assesses them, to ensure that they meet such party’s own technical, legal and contractual obligations, prior to any use.

We cannot accept responsibility for any party’s decision to use, or for use of, any of the technologies (including any online meeting solution) from time to time, which shall at all times remain the responsibility of such party. We also cannot accept liability for loss or damage of any kind arising from use of, or from inability to use, any of the technologies by any party (including any online meeting solution) or from use of, or reliance upon, this document by any party from time to time, and to the extent permitted by law exclude all conditions, warranties, representations or guarantees, whether express or implied, as to any online meeting solution) or any of the other technologies, or as to their availability, security, suitability or fitness for any purpose from time to time.

4.2.1 City & Guilds approach

The purpose of this section is to provide clarity on the most commonly used virtual meeting technologies and their suitability and acceptability for use on a one-to-one (not group) invigilation of our e-volve tests. This document should be considered in conjunction with your centre’s policies.

4.2.1.1 The advice is segmented into several categories:

Category	Advice
Advised	Wherever possible, this should be used to meet the City & Guilds requirement for invigilation.
Possible	This means that the technology could be used but is likely to have some limitations.
Not Permitted	The technology may work at some level, but City & Guild’s could not endorse or support its use. This is because it is technically unsuitable, or we believe there are security/GDPR risks that a centre should be aware of. These products must not be used for this remote invigilation solution.

The key parameters we are evaluating for any product are:

- technical capability (bandwidth and supported devices);
- support for multiple logins, each session could have four logins (two from the candidate, the invigilator, and an exam auditor if required);
- any known security/GDPR risks.

4.2.1.2 Validity of advice

Due to the volume and speed of releases to these software products, the information contained in this document is a snapshot at the point of publishing and may have changed subsequently. City & Guilds will update this document from time to time.

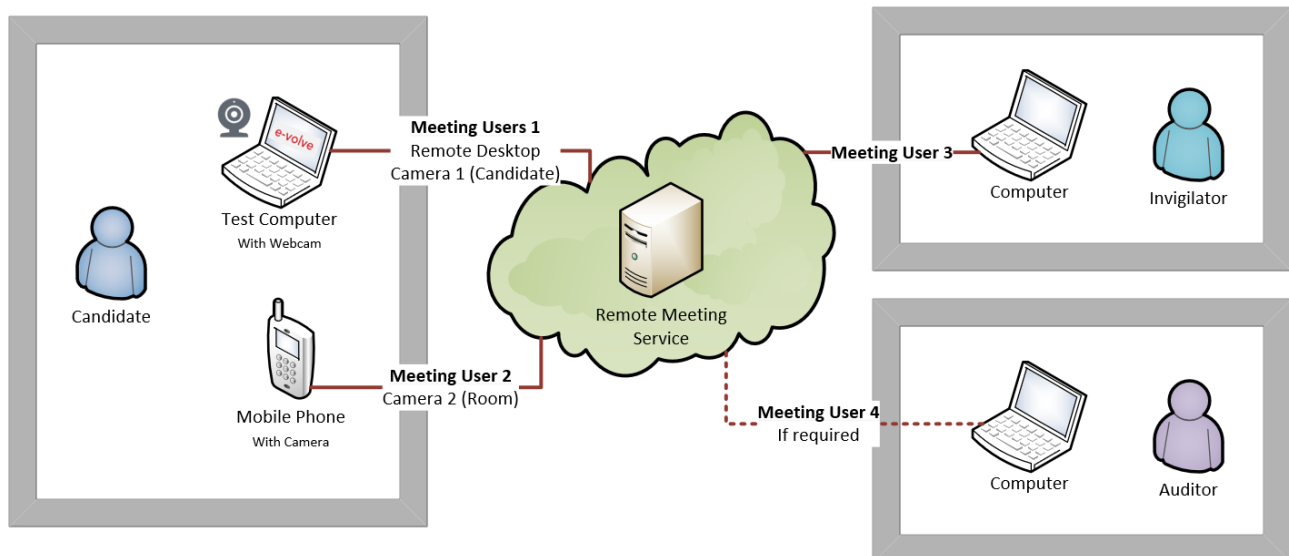
4.2.2 Best practice

4.2.2.1 Devices and purpose

The virtual meeting software must have support for multiple logins. Each session could have four logins, as follows:

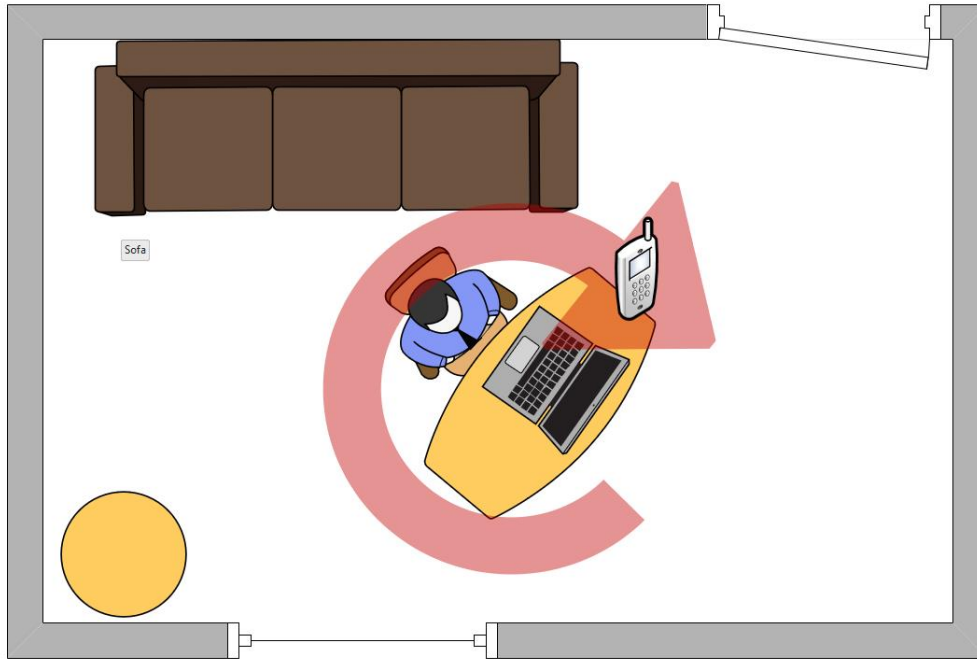
- the candidate and device running the test (sharing the camera and the test screen);
- a second device that is showing the room in which the candidate is taking the test;
- the invigilator;
- an exam auditor from City & Guilds (if required).

The diagram on the following page illustrates the expected configuration/setup for a remote invigilated test.



4.2.2.2 Optimal camera layout

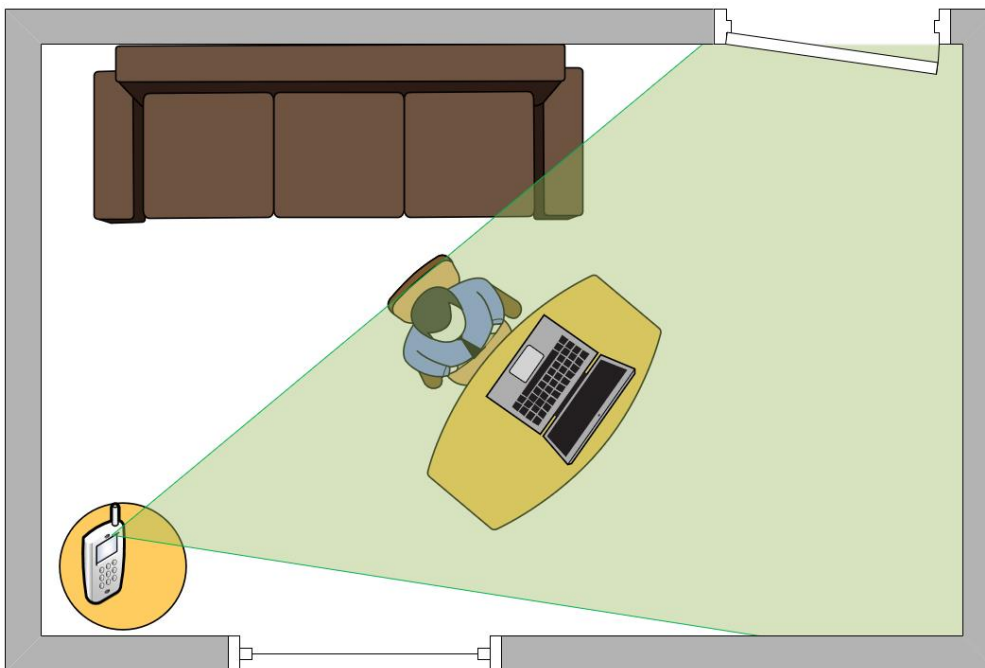
When needed or required, you can ask the candidate to use their mobile phone/tablet to display the whole room by rotating the device.



When sitting the test, the candidate must have both the computer and the mobile phone/tablet cameras switched on. The two devices should be positioned in such a way that:

- The computer camera shows the candidate and their upper torso as much as is possible in a front-on view.
- The mobile phone/tablet camera should be positioned at a wider angle so that it shows the candidate in profile and also gives an unimpeded view of as much of the room as is possible.

The diagram illustrates an example of this configuration:



4.2.2.3 Audio configuration

If a candidate enables audio on both devices (computer and mobile phone/tablet), it will cause sound distortion and feedback. To avoid this the candidate must:

- mute the meeting on their mobile phone;
- mute the media and call volume on their mobile phone;
- ensure that audio (speakers and microphone) are enabled on their computer.

4.2.2.4 Meeting security

The centre must consider the following to ensure the test is secure:

- During the test there is a strict prohibition of any recording of content, or screenshots being taken.
- Unfortunately, “[meeting bombing](#)” is becoming a real phenomenon. It does not affect all remote meeting software, but precautions must be taken. The online meeting must be locked to the invited attendees only and where this functionality is not available a meeting password must be set and shared with the candidate in advance.
- Before the test, review the security and meeting best practice for the chosen virtual meeting software and ensure you read and understand their privacy policy (linked below).
- Meeting software by its nature is designed for two-way communication. To avoid accidental distraction or unintended disclosure, the invigilator must switch off their camera and mute their speaker when not in communication with the candidate. After the test has been submitted and the session completed, the invigilator should also disconnect/hang-up the meeting.
- Ensure that your centre regularly checks for any security issues or technical issues that may affect your selected virtual meeting product.

4.2.3 Compatibility of different virtual meeting technologies

The table below describes the technology required and permitted for each role in the invigilation process.

What is the purpose?	Software Supported	Hardware Requirements	Device/OS Supported	Additional Software Required	Notes
Invigilate a test	<ul style="list-style-type: none"> ✓ Webex¹ ✓ Goto Meeting¹ ✓ Teams¹ 	<ul style="list-style-type: none"> ✓ Camera ✓ Microphone ✓ Speaker ✓ 2Mb Internet ✓ WIFI 	<ul style="list-style-type: none"> ✓ Microsoft Windows ✓ Apple Mac ✓ Web <ul style="list-style-type: none"> ✓ Linux 		Must be a desktop or laptop device with a large enough screen to see all video and desktop feeds clearly.
Take a test	<ul style="list-style-type: none"> ✓ Webex¹ ✓ Goto Meeting¹ ✓ Teams¹ 	<ul style="list-style-type: none"> ✓ Camera ✓ Microphone ✓ Speaker ✓ 2Mb Internet ✓ WIFI 	<ul style="list-style-type: none"> ✓ Microsoft Windows 	<ul style="list-style-type: none"> ✓ Flash enabled browser. 	e-volve requires the Microsoft Windows operating system (desktop or laptop) with a Flash enabled browser to function correctly.
Secondary Observation Camera	<ul style="list-style-type: none"> ✓ Webex² ✓ Goto Meeting² ✓ Teams² 	<ul style="list-style-type: none"> ✓ Camera ✓ 2Mb Internet ✓ WIFI 	<ul style="list-style-type: none"> ✓ Microsoft Windows ✓ Apple Mac ✓ Web <ul style="list-style-type: none"> ✓ Android ✓ IOS ✓ Linux 		Device should be mobile enough to be able to be taken around the room. Microphone and volume should be muted.

¹ Requires a compatible desktop device. Mobile or tablet devices should not be used.

² Any compatible device (mobile and tablet included) is permitted

4.2.4 Advice on virtual meeting technologies

Product	Status	Supported on*	Notes
LogMeIn Goto Meeting	Advised	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Web <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Android (Web) <input checked="" type="checkbox"/> IOS (Web) <input checked="" type="checkbox"/> Linux (Web) 	<p>Supported on all major devices as a native client or via the web. This product requires a subscription for the organiser.</p> <ul style="list-style-type: none"> • Manufacturers Site. • Advised Specification. • Privacy Policy
Cisco WebEx	Advised	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Web <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Android (Web) <input checked="" type="checkbox"/> IOS (Web) <input checked="" type="checkbox"/> Linux (Web) 	<p>Supported on all major devices as a native client or via the web. This product requires a subscription for the organiser.</p> <ul style="list-style-type: none"> • Manufacturers Site. • Advised Specification. • Privacy Policy
Microsoft Teams	Possible	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Web <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Linux (Web) 	<p>Supported on all major devices as a native client or via the web. This product requires a subscription for the organiser.</p> <ul style="list-style-type: none"> • Manufacturers Site. • Advised Specification. • Privacy Policy
Zoom	Possible	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Linux <input checked="" type="checkbox"/> Web 	<p>Supported on all major devices as a native client or via the web. This product requires a subscription for the organiser.</p> <ul style="list-style-type: none"> • Manufacturers Site. • Advised Specification. • Privacy Policy <p>A paid account is required for the invigilator because the free account has a time limit of 30 minutes for 3+ users. Because we require a second device to view the room it is effectively 3 users.</p>

Product	Status	Supported on*	Notes
Microsoft Skype for Business	Not Permitted	<input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Linux <input checked="" type="checkbox"/> Web	<p>Skype for Business does not allow the candidate to use two devices/ cameras and therefore limits the ability to invigilate the test.</p> <p>Therefore, it is not permitted for the remote invigilation solution at this time.</p>
Microsoft Skype (Personal)	Not Permitted	<input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac <input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Linux <input checked="" type="checkbox"/> Web	<p>Recent changes (removal of Grid View in late April 2020) means that Skype (Personal) does not allow the candidate to use two devices/ cameras and therefore limits the ability to invigilate the test.</p> <p>Therefore, it is not permitted for the remote invigilation solution at this time.</p>
Google Hangouts	Not Permitted	<input checked="" type="checkbox"/> Android <input checked="" type="checkbox"/> IOS <input checked="" type="checkbox"/> Linux <input checked="" type="checkbox"/> Google Chromebook <input checked="" type="checkbox"/> Web <input checked="" type="checkbox"/> Microsoft Windows <input checked="" type="checkbox"/> Apple Mac	<p>Google Hangouts is a well-established product, much more common in social use, but due to the Covid crisis, it is being adopted for business purposes. The product has had several well-published security issues in the past, which have been addressed promptly. There remain concerns about the relevant privacy policy and Google's use of data, including automated scanning for recommendations/smart assistant purposes. It is judged that Google has access to the stored data from Hangouts, which is a concern for data privacy.</p> <p>Therefore, it is not permitted for the remote invigilation solution at this time.</p>

*The supported devices/operating systems are an indication and exact compatibility will depend on the precise version of a device/operating system in use. Refer to the manufacturer's website to confirm compatibility.

4.3 Bandwidth/ connection

All online meeting technologies will require a significant level of network stability and connectivity to work.

The performance of internet connections (broadband) [across the UK](#) and world will vary. Therefore any advice given is generalised and will depend on individual factors such as signal strength and [connection contention](#).

When reviewing requirement, please consider the fact that a candidate will likely be using two devices (twice the bandwidth). Therefore, the advised software bandwidth expectations have been increased to allow for this.

The candidate should ask other users of their network (e.g. their home) not to use network demanding services (e.g. video streaming, audio streaming, gaming, video and audio calls, online meetings, etc.) for the duration of the test. This could help to reduce and avoid connectivity issues.

General connectivity should be tested as part of the technical checks performed, before starting the test. However, connectivity can fluctuate and so previous checks are no guarantee of access strength on the day of the test itself.

Connection	Status
Fixed Line/Fibre >4Mbps per user ADSL >4Mbps per user (2Mbps+ per connection for the candidate)	Advised
ADSL/Fixed Line/Fibre > 2Mbps per user (1Mbps+ per connection for candidate)	Possible
3G/4G/5G Mobile Data ADSL/Fixed Line/Fibre <2Mbps per user.	Not Permitted*

* Mobile connectivity is not suitable because by its nature it can be inherently unstable, and bandwidth is unpredictable. There is also a concern that the use of “mobile data” for such a prolonged period (1 hour+) may mean that the candidate could encounter unexpected charges if they exceed their data allowance. For these reasons, the secondary device (mobile phone or tablet) must be connected to Broadband/ADSL via Wi-Fi.

Glossary

Candidate	A <i>candidate</i> is an individual who is registered with City & Guilds and working towards a full or part qualification at a <i>centre</i> .
Centre	A <i>centre</i> is an organisation approved by City & Guilds to offer assessments leading to City & Guilds qualifications.
e-volve	<p><i>e-volve</i> is a web-based assessment tool for centres and organisations that allows them to administer tests delivery easily and efficiently. It is safe and secure, which offers candidates each test with a unique key code and prevents manipulation by displaying different questions to each candidate.</p> <p>Detailed guidance on e-volve including system requirements and user guides can be found at www.cityandguilds.com/evolve.</p>
Head of centre	<p>The <i>head of centre</i> is the person with responsibility for ensuring the overall management of the centre. The head of centre is:</p> <ul style="list-style-type: none">• the head of a school; or• the principal of a college; or• the chief officer of an institution which is approved by City & Guilds as a centre (including employers).
Invigilator	An <i>invigilator</i> is the person responsible for ensuring the secure conduct of all tests.
Mbps	Megabits per second (Mbps) are a unit of measurement for bandwidth and throughput on a network. Internet service providers commonly quote the bandwidth provided to a customer using this measure.
Test	A test is any externally marked component of a qualification available on e-volve or paper. For this solution only tests delivered on screen through e-volve are permitted.
Virtual meeting software	Software that allows several users to connect for a meeting using audio and video transmissions, even though they are not physically in the same location. A range of options are provided under Section 4.2 on page 16 of this document.

Checklist for invigilators

This list summarises the essential actions for invigilators.

A Before the day of the test

- 1 Check in advance with the Exams Officer if the candidate has any access arrangements.
- 2 Check requirements for authorised materials with the Exams Officer.
- 3 Send the candidate an appointment with the details of the call and conditions of the test.
- 4 Check the candidate's equipment meets the minimum specifications.

B On the day of the test

- 1 Check you can see and hear the candidate.
- 2 Check the room for unauthorised materials.
- 3 Ask the candidate to position their phone/tablet so you have a second view of the room.
- 4 Ask the candidate to confirm they will not be interrupted and that no one will enter the room.
- 5 Check the candidate's photographic identification.

C Starting the test

- 1 Give the candidate the URL to the web delivery site.
- 2 Give the candidate the correct keycode and PIN.
- 3 Ask the candidate to confirm it is their name on the screen.
- 4 Make sure that candidate is familiar with the instructions, procedures and regulations for the exam, particularly on how to navigate and respond on-screen.
- 5 Tell the candidate that they must now follow the regulations and instructions for the exam.
- 6 Check the candidate can see the full screen.
- 7 Make sure the candidate knows how to exit the exam when they have finished.

D During the test

- 1 Supervise the candidate at all times to prevent malpractice and distraction.
- 2 Do not give any information to the candidate about any question on the test or the requirements for answering particular questions.
- 3 Record and report any complaints from the candidate relating to system delays or any other IT irregularities.
- 4 Record and report all emergencies and/or technical failures.

E After the exam

- 1 Ensure that the candidate has exited the exam correctly.
- 2 Ask the candidate to throw away any scrap paper immediately.
- 3 Check with the centre that the test has been uploaded.
- 4 After the test has been marked, send the score report to the candidate.

F Calculators and Dictionaries (this advice to be given before the test as appropriate)

- 1 *Tell candidates if they are allowed to use a calculator.*
- 2 *Tell candidates if they are allowed to use a dictionary.*

Every effort has been made to ensure that the information contained in this publication is true and correct at time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information in this publication.

©2020 The City & Guilds of London Institute. All rights reserved. City & Guilds is a trade mark of the City & Guilds of London Institute, a charity established to promote education and training registered in England & Wales (312832) and Scotland (SC039576).

5-6 Giltspur Street, London EC1A 9DE.
cityandguilds.com