**21 CFR Part 11 Mapping**

**Checklist**

This comprehensive mapping checklist is designed to assist Life Sciences companies in understanding and executing the essential mandates established in 21 CFR Part 11, a regulation dedicated to electronic records and electronic signatures.
By adhering to these guidelines, organizations can uphold the integrity, confidentiality, and dependability of electronic data throughout its entire lifespan.

This checklist serves as a strategic roadmap, enabling companies to harmonize their processes and computerized systems with the precise prerequisites of 21 CFR Part 11.
Through its implementation, the checklist identifies gaps, highlights areas for enhancement, facilitates the implementation of necessary controls, and ensures ongoing compliance with the regulation.
With this invaluable tool, organizations can confidently and efficiently navigate the complexities of 21 CFR Part 11.

| **ITEM # & CFR REF.** | **DESCRIPTION** | **YES / NO / NA** | **EXPLANATION** |
| --- | --- | --- | --- |
| **Subpart B--Electronic Records - Sec. 11.10 Controls for closed systems** |
|  | 11.10 (a) | Validation of systems to ensure accuracy, reliability, consistent intended performance, and the ability to discern invalid or altered records. | Yes | Validation of systems is done as per defined procedure and individual plans are developed for each module. |
|  | 11.10 (b) | The ability to generate accurate and complete copies of records in both human readable and electronic form suitable for inspection, review, and copying by the agency. Persons should contact the agency if there are any questions regarding the ability of the agency to perform such review and copying of the electronic records. | Yes | Scilife application generates accurate and completed copies of records both in human readable and electronic format. |
|  | 11.10 (c) | Protection of records to enable their accurate and ready retrieval throughout the records retention period. | Yes | Records are maintained till retention period.Only authorized users can have access to records. |
|  | 11.10 (d) | Limiting system access to authorized individuals. | Yes | Scilife application access is user ID and password controlled. Additional Multi-Factor Authentication (MFA) is also available.Access to system functionality is governed through user access levels. |
|  | 11.10 (e) | Use of secure, computer-generated, time-stamped audit trails to independently record the date and time of operator entries and actions that create, modify, or delete electronic records. Record changes shall not obscure previously recorded information. Such audit trail documentation shall be retained for a period at least as long as that required for the subject electronic records and shall be available for agency review and copying. | Yes | Audit trail is available in the application which records all operator entries with user name, date, time and action performed.All record changes in the application are version controlled and the audit trail is ‘view only’.Audit trails are retained and are available for review and copy. |
|  | 11.10 (f) | Use of operational system checks to enforce permitted sequencing of steps and events, as appropriate. | Yes | Application uses operation system checks to enforce sequencing or flow of steps. |
|  | 11.10 (g) | Use of authority checks to ensure that only authorized individuals can use the system, electronically sign a record, access the operation or computer system input or output device, alter a record, or perform the operation at hand. | Yes | Only authorized users can login into the system using user ID and password. Additionally MFA authentication can be configured. |
|  | 11.10 (h) | Use of device (e.g., terminal) checks to determine, as appropriate, the validity of the source of data input or operational instruction. | NA | NA |
|  | 11.10 (i) | Determination that persons who develop, maintain, or use electronic record / electronic signature systems have the education, training, and experience to perform their assigned tasks. | Yes | Training management procedures are available and training records are maintained. Training module is used for this purpose. |
|  | 11.10 (j) | The establishment of, and adherence to, written policies that hold individuals accountable and responsible for actions initiated under their electronic signatures, in order to deter record and signature falsification. | Yes | Data and control related procedures and policies are available. |
|  | 11.10 (k) | Use of appropriate controls over systems documentation including:(1) Adequate controls over the distribution of, access to, and use of documentation for system operation and maintenance.(2) Revision and change control procedures to maintain an audit trail that documents time-sequenced development and modification of systems documentation. | Yes | Procedural controls are available. |
| **Sec. 11.50 Signature manifestations** |
|  | 11.50 (a) | Signed electronic records shall contain information associated with the signing that clearly indicates all of the following:(1) The printed name of the signer;(2) The date and time when the signature was executed; and(3) The meaning (such as review, approval, responsibility, or authorship) associated with the signature. | Yes | System asks for electronic signature for creation, modification or confirmation of records as per module configurations.Each executed electronic signature contains the printed name of the signer, date and time of signature and meaning of the signature. |
|  | 11.50 (b) | The items identified in paragraphs (a)(1), (a)(2), and (a)(3) of this section shall be subject to the same controls as for electronic records and shall be included as part of any human readable form of the electronic record (such as electronic display or printout). | Yes | Electronic signatures are subject to the same controls as electronic records. |
| **Sec. 11.70 Signature/record linking** |
|  | 11.70 | Electronic signatures and handwritten signatures executed to electronic records shall be linked to their respective electronic records to ensure that the signatures cannot be excised, copied, or otherwise transferred to falsify an electronic record by ordinary means. | Yes | Electronic signatures are implemented such that signatures cannot be excised, copied or transferred to falsify an electronic record by ordinary means. |
| **Subpart C--Electronic Signatures - Sec. 11.100 General requirements** |
|  | 11.100 (a) | Each electronic signature shall be unique to one individual and shall not be reused by, or reassigned to, anyone else. | Yes | Electronic signatures are unique to individuals, duplicate credentials cannot be created. |
|  | 11.100 (b) | Before an organization establishes, assigns, certifies, or otherwise sanctions an individual’s electronic signature, or any element of such electronic signature, the organization shall verify the identity of the individual. | Yes | Procedure control is in place. |
|  | 11.100 (c) | Persons using electronic signatures shall, prior to or at the time of such use, certify to the agency that the electronic signatures in their system, used on or after August 20, 1997, are intended to be the legally binding equivalent of traditional handwritten signatures.(1) The certification shall be submitted in paper form and signed with a traditional handwritten signature, to the Office of Regional Operations (HFC–100), 5600 Fishers Lane, Rockville, MD 20857.(2) Persons using electronic signatures shall, upon agency request, provide additional certification or testimony that a specific electronic signature is the legally binding equivalent of the signer’s handwritten signature. | Yes | Procedure control is in place. |
| **Subpart C--Electronic Signatures - Sec. 11.200 Electronic signature components and controls** |
|  | 11.200 (a) | Electronic signatures that are not based upon biometrics shall:(1) Employ at least two distinct identification components such as an identification code and password.(i) When an individual executes a series of signings during a single, continuous period of controlled system access, the first signing shall be executed using all electronic signature components; subsequent signings shall be executed using at least one electronic signature component that is only executable by, and designed to be used only by, the individual.(ii) When an individual executes one or more signings not performed during a single, continuous period of controlled system access, each signing shall be executed using all of the electronic signature components.(2) Be used only by their genuine owners; and (3) Be administered and executed to ensure that attempted use of an individual’s electronic signature by anyone other than its genuine owner requires collaboration of two or more individuals. | Yes | Electronic signatures consist of two different components i.e. user ID and password for initial signing.For subsequent signing in a continuous session, the system only asks for the password component of the signature.For non-continuous sessions, the system asks for both user ID and password for signing. |
|  | 11.200 (b) | Electronic signatures based upon biometrics shall be designed to ensure that they cannot be used by anyone other than their genuine owners. | Yes | Electronic signatures are unique to individuals. |
| **Subpart C--Electronic Signatures - Sec. 11.300 Controls for identification codes/passwords** |
|  | 11.300 (a) | Maintaining the uniqueness of each combined identification code and password, such that no two individuals have the same combination of identification code and password. | Yes | Electronic signatures are unique to individuals. |
|  | 11.300 (b) | Ensuring that identification codes and passwords are periodically checked, recalled, or revised (e.g., to cover such events as password aging). | Yes | Application has configurable password expiry setting, which enforces users to change password when password age has been reached. |
|  | 11.300 (c) | Following loss management procedures to electronically deauthorize lost, stolen, missing, or otherwise potentially compromised tokens, cards, and other devices that bear or generate identification code or password information, and to issue temporary or permanent replacements using suitable, rigorous controls. | NA | Tokens, cards or other devices are not used for authorization. |
|  | 11.300 (d) | Use of transaction safeguards to prevent unauthorized use of passwords and/or identification codes, and to detect and report in an immediate and urgent manner any attempts at their unauthorized use to the system security unit, and, as appropriate, to organizational management. | NA | Unauthorized login attempts are only captured in system logs. |
|  | 11.300 (e) | Initial and periodic testing of devices, such as tokens or cards, that bear or generate identification code or password information to ensure that they function properly and have not been altered in an unauthorized manner. | NA | Tokens, cards or other devices are not used for authorization. |