Descriptive Changelog for 2.0.0 Release

Changes in SecurityTokenRegistry and TickerRegistry:

- TickerRegistry contract is removed from the 2.0.0 release. So every TickerRegistry functions can be called from the STR.
- Rename LogNewSecurityToken event to NewSecurityToken with change in parameters NewSecurityToken(string _ticker, string _name, address indexed _securityTokenAddress, address indexed _owner, uint256 _addedAt, address _registrant, bool _fromAdmin, uint256 _registrationFee);
- Rename the addCustomSecurityToken() to modifySecurityToken() by introducing the new parameter _deployedAt(uint256 is the timestamp at which security Token was deployed) and remove the variable _swarmHash from the function call. #199
- modifySecurityToken() emits NewSecurityToken event.
- Deleted LogAddCustomSecurityToken.
- Change in the function parameter _version to _major, _minor, _patch.
- Return one more variable called _deployedAt in the getSecurityTokenData() function call. #199
- changePolyRegistrationFee() renamed to changeSecurityLaunchFee().
- LogChangePolyRegistrationFee
 event is rename to ChangeSecurityLaunchFee.
- polymathRegistry, moduleRegistry, securityTokenRegistry, tickerRegistry, polyToken variable is removed from the contract.
- To access polymathRegistry, polyToken variables from STR we introduced a common function called getAddressValues(bytes32 _variable). ex- to access the value is
 - contract.getAddressValues(web3.utils.soliditySha3(_variable))
- registrationFee has renamed to _stLaunchFee and it only be accessed using
 new function called getSecurityTokenLaunchFee().
- updatePolyTokenAddress (address _newAddress) is introduced to change the polyToken address in the STR. only accessed by the owner of the STR.
- updateFromRegistry() has removed from the STR.
- isPaused() function has introduced to know the status whether STR operations are paused or not.

- paused variable is removed.
- Added getSTFactoryAddress() to access the current STFactory Address.
- Added getProtocolVersion() to access the current protocol version.
- Remove the swarmHash variable from the registerTicker() params list.
- Rename the LogRegisterTicker with RegisterTicker and introduced some new parameters in event event RegisterTicker(address indexed _owner, string _ticker, string _name, uint256 indexed _registrationDate, uint256 indexed _expiryDate, bool _fromAdmin, uint256 _registrationFee);
- getTickerRegistrationFee() function is introduced to access the ticker registration fee.
- registrationFee variable has removed.
- expiryLimit value has changed from 15 days to 60 days.
- getExpiryLimit() function is used to access the expiryLimit.
- Rename event LogChangeExpiryLimit to ChangeExpiryLimit.
- checkValidity(), isReserved() functions are removed.
- getDetails() has renamed to getTickerDetails().
- Introduced changeTickerRegistrationFee() function to change the ticker registration fees.
- Added modifyTicker() function to modifies the ticker details. Only Polymath has the ability to call this function.
- Added removeTicker() function to removes the ticker details, associated ownership & security token mapping and emit TickerRemoved(string _ticker, uint256 _removedAt, address _removedBy) event. Only Polymath has the ability to call this function.
- Added transferTickerOwnership() function to transfers the ownership of the ticker and emits ChangeTickerOwnership(string _ticker, address indexed _oldOwner, address indexed _newOwner) event.
- Added getTickersByOwner() function to returns the list of tickers owned by the selected address.
- Added getTokensByOwner() function to returns the list of tokens owned by the selected address.

Changes in the ModuleRegistry:

- useModule() entertain modules those are deployed and verified by the PM only and if the customModulesAllowed feature is true then it also allows to use Module those are deployed by the issuer.
- Similarly for registerModule().
- Added removeModule() to remove the module.
- Added getTagsByTypeAndToken(uint8 _moduleType, address _securityToken) to returns all the tags related to the a module type which are valid for the given token.
- Added getTagsByType() to return the tags according to the module type.
- Removed getTagByModuleType(), addTagByModuleType(), removeTagByModuleType().
- Added getModulesByType() to get the list of addresses of Module Factory of a particular type.
- Added getReputationByFactory() to get the reputation of the factory.
- Added getModulesByTypeAndToken() to get the list of available Module factory addresses of a particular type for a given token.

Changes in SecurityToken:

- Added getVersion() to access the securityToken version.
- tokenBurner variable has removed.
- tokenDetails is used to store that off-chain data hash.
- freeze is renamed to transfersFrozen used to halt the transaction.
- finishedIssuerMinting, finishedSTOMinting is removed and a new variable introduced mintingFrozen to permanently halt all minting.
- currentCheckpointId public variable has added to access the value of current checkpoint.
- controllerDisabled boolean variable is added to permanently halt controller actions.
- Remove the MAX_MODULES variables from the ST.
- Event LogModuleAdded, LogModuleRemoved is renamed to ModuleAdded,
 ModuleRemoved respectively and uint8 indexed _type variables is now replaced with uint8[] _types.
- Removed Log prefix from all events present in the ST.
- Event LogModuleBudgetChanged is renamed to ModuleBudgetChanged and change its params as ModuleBudgetChanged(uint8[] _moduleTypes, address _module, uint256 _oldBudget, uint256 _budget).

- In event FreezeTransfers variable _freeze is replaced with _status.
- LogFinishMintingIssuer & LogFinishMintingSTO have been removed and new event introduced to log the minting is FreezeMinting(uint256 _timestamp).
- Added archiveModule(address _module) & unarchiveModule(address _module)
 function added. Only be called by the Issuer.
- Module is only be removed removeModule() until the module get archived first.
- getModule() function signature is change to getModule(address _module) with return parameters bytes32 name of module, address module address, address module factory address, bool module archived, uint8 module type.
- getModulesByName() function signature is change to getModulesByName(bytes32 _name) and returns the list of module address with the same name address[].
- Added getModulesByType(uint8 _type) to returns a list of modules that match the provided module type.
- withdrawPoly() has removed and introduced a new function called withdrawERC20() similar to reclaimERC20() function.
- Remove the moduleIndex parameter from the changeModuleBudget() function call.
- Added getInvestors(), getInvestorCount() functions to get the list of investors and the count of the investors respectively.
- Remove getInvestorsLength().
- Added transferWithData(), transferFromWithData() to allow passing of a 'bytes data' for off-chain validation.
- Added _data parameter in verifyTransfer() function params.
- finishMintingIssuer(), finishMintingSTO() are removed and introduced a new function called freezeMinting() to freeze minting.
- Added mintWithData().
- Removed setTokenBurner().
- Added burnFromWithData(), burnWithData() functions to burn the tokens and these functions only be called by the BURN_KEY type module and remove the burn() function.
- Added getCheckpointTimes() function to get list of times that checkpoints were created.
- Added setController(), disableController() functions to add controller and disable controllers completely.
- Added forceTransfer(), forceBurn() functions called by the controllers.
- Added getVersion() function to get the version of ST.