

Cloudera Flow Management 2.1.5

Cloudera Flow Management Release Notes

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CLOUDERA

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What's new in this release?

Learn about the new functionalities and improvements in Cloudera Flow Management (CFM) and how these new features benefit you.

CFM 2.1.5 Service Pack 3

On November 2, 2023, Cloudera released CFM 2.1.5 SP3. For more information about the issues fixed in CFM 2.1.5 SP3, see [Fixed issues](#).

Upgrade to CFM 2.1.5.3000 to access the latest version of the software. You can find the new download links in [Download locations](#).

CFM 2.1.5 Service Pack 2

On October 11, 2023, Cloudera released CFM 2.1.5 SP2. For more information about the issues fixed in CFM 2.1.5 SP2, see [Fixed issues](#) and [Fixed CVEs](#).

If you are using CFM 2.1.5.0 or CFM 2.1.5.1000, upgrade to CFM 2.1.5.2000 to access the latest version of the software. You can find the new download links in [Download locations](#).

CFM 2.1.5 Service Pack 1

On April 12, 2023, Cloudera released CFM 2.1.5 SP1 containing the following updates and fixes:

- Iceberg related components are now generally available.
 - Processor: PutIceberg
 - Controller Services: HadoopCatalogService, HiveCatalogService
- Multiple bugs have been fixed, in particular around the management of versioned flows with NiFi Registry after upgrades.
- A significant number of dependencies have been upgraded to more recent versions.
- Some new components have been added:
 - ListenGRPC, ConvertProtobuf for gRPC with custom schemas
 - EncodeContent, DecryptContent, DecryptContentCompatibility
 - GetAsanaObject
 - GetGcpVisionAnnotateFilesOperationStatus, GetGcpVisionAnnotateImagesOperationStatus, StartGcpVisionAnnotateFilesOperation, StartGcpVisionAnnotateImagesOperation
 - GetJiraIssue
 - JSLTTransformJSON
 - PutBoxFile, PutDropbox, PutGoogleDrive
 - PutIoTDBRecord
 - PutRedisHashRecord (Technical Preview)
 - PutSalesforceObject
 - TriggerHiveMetaStoreEvent
 - UpdateDeltaLakeTable (Technical Preview)



Note: Now there are two ListenGRPC processors available, one from Apache and another one from Cloudera.

For more information about the issues fixed in CFM 2.1.5 SP1, see [Fixed issues](#) and [Fixed CVEs](#).

If you previously upgraded to CFM 2.1.5.0, upgrade to CFM 2.1.5.1000 to access the latest version of the software. You can find the new download links in [Download locations](#).

CFM 2.1.5

CFM 2.1.5 is released with a specific End of Support policy and will be supported until August 2025 to match the CDP 7.1.7 Long Term Support release. CFM 2.1.5 is based on Apache NiFi 1.18.0 and the most important new features and improvements of the release are:

PutIceberg processor

This release includes in Technical Preview a PutIceberg processor to ingest data using Iceberg table format.

Snowflake integration based on Snowpipe

This release includes in Technical Preview a set of processors (GetSnowflakeIngestStatus, StartSnowflakeIngest, and PutSnowflakeInternalStage) to ingest data into Snowflake using Snowpipe.

SaaS processors

This release includes a large range of new SaaS processors allowing you to interact with systems such as Workday, Box, Google Drive, Dropbox, HubSpot, or Airtable.

Registry client to connect to the Cloudera DataFlow Catalog

It is now possible to configure a Registry client in NiFi to connect to a Cloudera DataFlow Catalog instance and to use it as a NiFi Registry for checking out versioned flows and versioning your flows.

Parameter Providers

It is now possible to create Parameter Providers in the Controller Settings. This gives the ability to source values of parameters from external sources such as HashiCorp Vault, AWS Secrets Manager, or Databases. You can read more about this new feature in *Using Parameter Providers*.

Removed processors

Two processors have been removed in this release: ExecuteFlumeSink and ExecuteFlumeSource.

Related Information

[Using Parameter Providers](#)

CFM component versions

Review the official component versions for Cloudera Flow Management (CFM) for compatibility with other applications.



Note: NiFi works with the version of NiFi Registry shipped with your version of CFM or later.

CFM 2.1.5 SP3

- Apache NiFi 1.18.0.2.1.5.3000
- Apache NiFi Registry 1.18.0.2.1.5.3000

CFM 2.1.5 SP2

- Apache NiFi 1.18.0.2.1.5.2000
- Apache NiFi Registry 1.18.0.2.1.5.2000

CFM 2.1.5 SP1

- Apache NiFi 1.18.0.2.1.5.1000
- Apache NiFi Registry 1.18.0.2.1.5.1000

CFM 2.1.5

- Apache NiFi 1.18.0.2.1.5.0
- Apache NiFi Registry 1.18.0.2.1.5.0

CFM 2.1.4 SP1

- Apache NiFi 1.16.0.2.1.4.1000
- Apache NiFi Registry 1.16.0.2.1.4.1000

CFM 2.1.4

- Apache NiFi 1.16.0.2.1.4.0
- Apache NiFi Registry 1.16.0.2.1.4.0

CFM 2.1.3

- Apache NiFi 1.15.2.2.1.3.0
- Apache NiFi Registry 1.15.2.2.1.3.0



Note: Apache NiFi and Apache NiFi Registry version are unified in the 1.15.x release.

CFM 2.1.2

- Apache NiFi 1.13.2.2.1.2.0
- Apache NiFi Registry 0.8.0.2.1.2.0

CFM 2.1.1

- Apache NiFi 1.13.2.2.1.1.0
- Apache NiFi Registry 0.8.0.2.1.1.0

CFM 2.0.4

- Apache NiFi 1.11.4
- Apache NiFi Registry 0.6.0

CFM 2.0.1

- Apache NiFi 1.11.4
- Apache NiFi Registry 0.6.0

Support matrix

Review the support matrix before you start installing Cloudera Flow Management (CFM).

System requirements

Review the system requirements before getting started with installing Cloudera Flow Management (CFM).

Supported versions of CDP

CFM 2.1.5 supports the following versions of CDP Private Cloud Base:

- CDP 7.1.7 and all Service Packs
- CDP 7.1.8



Note: CFM provides a set of monitoring features when managed by Cloudera Manager. For these features to be available and working, you need to be using Cloudera Manager 7.6.1 or above.

Supported JAVA Development Kits (JDK)



Note: If using Java 8, use only Update 252 (JDK 8u252) and later.

- Oracle Java™ SE Development Kit 8, Update 252 (JDK 8u252) and later
- OpenJDK 1.8, Update 252 (JDK 8u252) and later
- OpenJDK 11
- Azul Zulu JDK 1.8, Update 252 (JDK 8u252) and later
- Azul Zulu JDK 11

Other system requirements

ZooKeeper

You must install the ZooKeeper service available with your CDP Private Cloud Base cluster.

Python

When deploying CFM on RHEL 8 and using Cloudera Manager with Python 2, you need to specify a symbolic link to python2.

```
ln -s /usr/bin/python2 /usr/bin/python
```

Number of cores

Four cores per NiFi node is the minimum number of cores required by Cloudera to be supported. Cloudera recommends eight cores per NiFi node as it usually provides the best starting point for the most common use cases.

Supported operating systems

Review the list of operating systems supported by Cloudera Flow Management (CFM).

| Operating system | Versions |
|------------------|--|
| CentOS | <ul style="list-style-type: none"> • 7.6 • 7.7 • 7.8 • 7.9 • 8.2 • 8.4 |
| RHEL | <ul style="list-style-type: none"> • 7.6 • 7.7 • 7.8 • 7.9 • 8.2 • 8.4 • 8.6 • 8.7 |
| SLES | <ul style="list-style-type: none"> • 12 SP5 |

| Operating system | Versions |
|------------------|--|
| Ubuntu | <ul style="list-style-type: none"> 18.04 20.04 |
| Windows | <ul style="list-style-type: none"> 10 Server 2016 Server 2019 |

**Note:**

NiFi on Windows is only supported in standalone mode, not managed by Cloudera Manager or as part of a CDP cluster, and as a single instance installation. Clustering NiFi on Windows is not supported.

NiFi Registry is not supported on Windows.

Supported NiFi Registry databases

Review the list of databases supported by NiFi Registry.

- H2
- PostgreSQL 10.x
- PostgreSQL 11.x
- PostgreSQL 12.x
- PostgreSQL 13.x
- PostgreSQL 14.x
- MySQL 8.x

Related Information

[Supported NiFi processors](#)

[Supported NiFi controller services](#)

[Supported NiFi reporting tasks](#)

[Components supported by partners](#)

Supported NiFi processors

Cloudera Flow Management (CFM) is shipped with Apache NiFi and includes a set of processors, most of which are supported by Cloudera. You should be familiar with the available supported processors, and avoid using any unsupported processors in production environments.

Additional processors are developed and tested by the Cloudera community but are not officially supported by Cloudera. Processors are excluded for a variety of reasons, including insufficient reliability or incomplete test case coverage, declaration of non-production readiness by the community at large, and feature deviation from Cloudera best practices.

| | | |
|----------------------|---|-----------------------------|
| AttributesToCSV | GetGcpVisionAnnotateImagesOperationStatus | PutDropbox |
| AttributesToJSON | GetHBase | PutDynamoDB |
| Base64EncodeContent | GetHDFS | PutDynamoDBRecord |
| CalculateRecordStats | GetHDFSFileInfo | PutElasticsearchHttp1 |
| CaptureChangeMySQL | GetHDFSSequenceFile | PutElasticsearchHttpRecord1 |
| CompressContent1,2 | GetHTMLElement | PutElasticsearchJson |
| ConnectWebSocket | GetHTTP | PutElasticsearchRecord1 |
| ConsumeAMQP | GetHubSpot | PutEmail |

| | | |
|-----------------------------|--|---|
| ConsumeAzureEventHub | GetIgniteCache | PutFile |
| ConsumeEWS | GetJiraIssue | PutFTP1 |
| ConsumeGCPubSub | GetJMSQueue | PutGCSObject |
| ConsumeGCPubSubLite | GetJMSTopic | PutGoogleDrive |
| ConsumeJMS | GetMongoRecord | PutGridFS |
| ConsumeKafka_1_0 | GetSFTP | PutHBaseCell |
| ConsumeKafka_2_0 | GetShopify | PutHBaseJSON |
| ConsumeKafka_2_6 | GetSNMP | PutHBaseRecord1 |
| ConsumeKafka2CDP | GetSnowflakeIngestStatus (Technical Preview) | PutHDFS |
| ConsumeKafka2RecordCDP | GetSolr | PutHive3QL |
| ConsumeKafkaRecord_1_0 | GetSplunk | PutHive3Streaming |
| ConsumeKafkaRecord_2_0 | GetSQS | PutHiveQL |
| ConsumeKafkaRecord_2_6 | GetTCP | PutHiveStreaming |
| ConsumeKinesisStream | GetTwitter | PutHTMLElement |
| ConsumeMQTT1 | GetWorkdayReport | PutIceberg |
| ConsumeTwitter | GetZendesk | PutInfluxDB |
| ConsumeWindowsEventLog | HandleHttpRequest | PutLoTDBRecord |
| ControlRate | HandleHttpResponse | PutJMS1 |
| ConvertAvroSchema | HashAttribute | PutKinesisFirehose |
| ConvertAvroToJSON | HashContent | PutKinesisStream |
| ConvertAvroToORC | IdentifyMimeType | PutKudu |
| ConvertAvroToParquet | InvokeAWSGatewayApi | PutLambda |
| ConvertCharacterSet | InvokeGRPC | PutMongoRecord |
| ConvertCSVToAvro | InvokeHTTP | PutORC1 |
| ConvertJSONToAvro | InvokeScriptedProcessor | PutParquet |
| ConvertJSONToSQL | JoinEnrichment | PutRecord |
| ConvertProtobuf | JoltTransformJSON | PutRedisHashRecord (Technical Preview) |
| ConvertRecord | JoltTransformRecord | PutRiemann |
| CreateHadoopSequenceFile | JSLTTransformJSON | PutS3Object |
| CryptographicHashAttribute | JsonQueryElasticsearch | PutSalesforceObject |
| CryptographicHashContent | ListAzureBlobStorage | PutSFTP |
| DecryptContent | ListAzureBlobStorage_v12 | PutSmbFile |
| DecryptContentCompatibility | ListAzureDataLakeStorage | PutSnowflakeInternalStage (Technical Preview) |
| DecryptContentPGP | ListBoxFile | PutSNS |
| DeduplicateRecord | ListCDPObjectStore | PutSolrContentStream |
| DeleteAzureBlobStorage | ListDatabaseTables | PutSolrRecord |
| DeleteAzureBlobStorage_v12 | ListDropbox | PutSplunk |
| DeleteAzureDataLakeStorage | ListenBeats | PutSplunkHTTP |
| DeleteByQueryElasticsearch | ListenFTP | PutSQL |

| | | |
|---------------------------|---------------------------------|---------------------------|
| DeleteCDPObjectStore | ListenGRPC* | PutSQS1 |
| DeleteDynamoDB | ListenGRPC* | PutSyslog |
| DeleteGCSObject | ListenHTTP | PutTCP |
| DeleteGridFS | ListenRELP | PutUDP |
| DeleteHBaseCells | ListenSyslog | PutWebSocket1 |
| DeleteHBaseRow | ListenTCP | QueryAirtableTable |
| DeleteHDFS | ListenTCPRecord | QueryCassandra |
| DeleteS3Object | ListenTrapSNMP | QueryDatabaseTable1 |
| DeleteSQS | ListenUDP | QueryDatabaseTableRecord |
| DetectDuplicate | ListenUDPRecord | QueryElasticsearchHttp |
| DistributeLoad | ListenWebSocket | QueryRecord |
| DuplicateFlowFile | ListFile | QuerySalesforceObject |
| EncodeContent | ListFTP | QuerySolr |
| EncryptContent2 | ListGCSBucket | QuerySplunkIndexingStatus |
| EncryptContentPGP | ListGoogleDrive | QueryWhois |
| EnforceOrder | ListHDFS | ReplaceText |
| EvaluateJsonPath | ListS3 | ReplaceTextWithMapping |
| EvaluateXPath | ListSFTP | ResizeImage1 |
| EvaluateXQuery | ListSmb | RetryFlowFile |
| ExecuteGroovyScript | LogAttribute | RouteHL7 |
| ExecuteInfluxDBQuery | LogMessage | RouteOnAttribute |
| ExecuteProcess | LookupAttribute | RouteOnContent |
| ExecuteScript | LookupRecord | RouteText |
| ExecuteSQL | MergeContent | SampleRecord |
| ExecuteSQLRecord | MergeRecord1 | ScanAccumulo |
| ExecuteStateless1,2 | ModifyHTMLElement | ScanAttribute1 |
| ExecuteStreamCommand | MonitorActivity | ScanContent |
| ExtractAvroMetadata | MoveAzureDataLakeStorage | ScanHBase |
| ExtractGrok | MoveHDFS | ScriptedFilterRecord |
| ExtractHL7Attributes | Notify | ScriptedPartitionRecord |
| ExtractImageMetadata | PaginatedJsonQueryElasticsearch | ScriptedTransformRecord |
| ExtractText | ParseCEF1 | ScriptedValidateRecord |
| FetchAzureBlobStorage | ParseEvtx | ScrollElasticsearchHttp |
| FetchAzureBlobStorage_v12 | ParseSyslog | SearchElasticsearch |
| FetchAzureDataLakeStorage | PartitionRecord | SegmentContent |
| FetchBoxFile | PostHTTP | SelectHive3QL1 |
| FetchCDPObjectStore | PublishAMQP | SelectHiveQL |
| FetchDistributedMapCache | PublishGCPubSub1 | SendTrapSNMP |
| FetchDropbox | PublishGCPubSubLite1 | SetSNMP |
| FetchElasticsearchHttp | PublishJMS1 | SignContentPGP |

| | | |
|--|--------------------------|--|
| FetchFile | PublishKafka_1_0 | SplitAvro |
| FetchFTP | PublishKafka_2_0 | SplitContent |
| FetchGCSObject | PublishKafka_2_6 | SplitJson1 |
| FetchGoogleDrive | PublishKafka2CDP | SplitRecord1 |
| FetchGridFS | PublishKafka2RecordCDP | SplitText1 |
| FetchHBaseRow | PublishKafkaRecord_1_0 | SplitXml |
| FetchHDFS | PublishKafkaRecord_2_0 | StartGcpVisionAnnotateFilesOperation |
| FetchParquet | PublishKafkaRecord_2_6 | StartGcpVisionAnnotateImagesOperation |
| FetchS3Object | PublishMQTT | StartSnowflakeIngest (Technical Preview) |
| FetchSFTP | PutAccumuloRecord1 | TagS3Object |
| FetchSmb | PutAzureBlobStorage | TailFile |
| FlattenJson | PutAzureBlobStorage_v12 | TransformXml |
| ForkEnrichment | PutAzureCosmosDBRecord | TriggerHiveMetaStoreEvent |
| ForkRecord | PutAzureDataLakeStorage1 | UnpackContent |
| GenerateFlowFile | PutAzureEventHub | UpdateAttribute |
| GenerateTableFetch | PutAzureQueueStorage1 | UpdateByQueryElasticsearch |
| GeoEnrichIP | PutBigQuery | UpdateCounter |
| GeoEnrichIPRecord | PutBigQueryBatch | UpdateDatabaseTable |
| GeohashRecord | PutBigQueryStreaming | UpdateDeltaLakeTable (Technical Preview) |
| GetAsanaObject | PutBoxFile | UpdateHive3Table |
| GetAzureEventHub | PutCassandraQL1 | UpdateHiveTable |
| GetAzureQueueStorage | PutCassandraRecord1 | UpdateRecord |
| GetCouchbaseKey1 | PutCDPObjectStore | ValidateCsv |
| GetElasticsearch | PutCloudWatchMetric | ValidateRecord |
| GetFile | PutCouchbaseKey | ValidateXml |
| GetFTP | PutDatabaseRecord1 | VerifyContentPGP |
| GetGcpVisionAnnotateFilesOperationStatus | PutDistributedMapCache | Wait |
| | | YandexTranslate |

Footnotes

- 1 – indicates a memory intensive processor
- 2 – indicates a CPU intensive processor
- * – there are two ListenGRPC processors available, one from Apache and another one from Cloudera

Related Information

[Supported NiFi Registry databases](#)

[Supported NiFi controller services](#)

[Supported NiFi reporting tasks](#)

[Components supported by partners](#)

Supported NiFi controller services

Cloudera Flow Management (CFM) is shipped with Apache NiFi and includes a set of controller services, most of which are supported by Cloudera. You should be familiar with the available supported controller services, and avoid using any unsupported controller services in production environments.

Additional controller services are developed and tested by the Cloudera community but are not officially supported by Cloudera. Controller services are excluded for a variety of reasons, including insufficient reliability or incomplete test case coverage, declaration of non-production readiness by the community at large, and feature deviation from Cloudera best practices.

| | |
|--|---|
| AccumuloService | JASNIReader |
| ActionHandlerLookup (Technical Preview) | JMSConnectionFactoryProvider |
| ADLSCredentialsControllerService | JndiJmsConnectionFactoryProvider |
| ADLSIDBrokerCloudCredentialsProviderControllerService | JsonConfigBasedBoxClientService |
| AlertHandler (Technical Preview) | JsonPathReader |
| AvroReader | JsonRecordSetWriter |
| AvroRecordSetWriter | JsonTreeReader |
| AvroSchemaRegistry | KafkaRecordSink_1_0 |
| AWSCredentialsProviderControllerService | KafkaRecordSink_2_0 |
| AWSIDBrokerCloudCredentialsProviderControllerService | KafkaRecordSink_2_6 |
| AzureBlobIDBrokerCloudCredentialsProviderControllerService | KerberosKeytabUserService |
| AzureCosmosDBClientService | KerberosPasswordUserService |
| AzureEventHubRecordSink | KerberosTicketCacheUserService |
| AzureStorageCredentialsControllerService | KeytabCredentialsService |
| AzureStorageCredentialsControllerService_v12 | KuduLookupService |
| AzureStorageCredentialsControllerServiceLookup | LoggingRecordSink |
| CassandraDistributedMapCache | LogHandler (Technical Preview) |
| CassandraSessionProvider | MongoDBControllerService |
| CdpCredentialsProviderControllerService | MongoDBLookupService |
| CdpOAuth2AccessTokenProviderControllerService | ParquetReader |
| CEFReader | ParquetRecordSetWriter |
| ConfluentSchemaRegistry | PrometheusRecordSink |
| CouchbaseClusterService | ReaderLookup |
| CouchbaseKeyValueLookupService | RecordSetWriterLookup |
| CouchbaseMapCacheClient | RecordSinkHandler (Technical Preview) |
| CouchbaseRecordLookupService | RecordSinkServiceLookup |
| CSVReader | RedisConnectionPoolService |
| CSVRecordLookupService | RedisDistributedMapCacheClientService |
| CSVRecordSetWriter | RestLookupService |
| DatabaseRecordLookupService | ScriptedActionHandler (Technical Preview) |
| DatabaseRecordSink | ScriptedLookupService |
| DBCPConnectionPool | ScriptedReader |
| DBCPConnectionPoolLookup | ScriptedRecordSetWriter |

| | |
|---|---|
| DistributedMapCacheClientService | ScriptedRecordSink |
| DistributedMapCacheLookupService | ScriptedRulesEngine (Technical Preview) |
| DistributedMapCacheServer | SimpleDatabaseLookupService |
| DistributedSetCacheClientService | SimpleKeyValueLookupService |
| DistributedSetCacheServer | SimpleScriptedLookupService |
| EasyRulesEngineProvider (Technical Preview) | SiteToSiteReportingRecordSink |
| EasyRulesEngineService (Technical Preview) | SmbjClientProviderService |
| ElasticSearchClientServiceImpl | SnowflakeComputingConnectionPool |
| ElasticSearchLookupService | StandardAsanaClientProviderService |
| ElasticSearchStringLookupService | StandardAzureCredentialsControllerService |
| EmailRecordSink | StandardDropboxCredentialService |
| EmbeddedHazelcastCacheManager | StandardHashiCorpVaultClientService |
| ExpressionHandler (Technical Preview) | StandardHttpContextMap |
| ExternalHazelcastCacheManager | StandardOAuth2AccessTokenProvider |
| FreeFormTextRecordSetWriter | StandardPGPPPrivateKeyService |
| GCPCredentialsControllerService | StandardPGPPublicKeyService |
| GrokReader | StandardProxyConfigurationService |
| HadoopDBCPCConnectionPool | StandardRestrictedSSLContextService |
| HadoopCatalogService | StandardS3EncryptionService |
| HazelcastMapCacheClient | StandardSSLContextService |
| HBase_1_1_2_ClientMapCacheService | StandardWebClientServiceProvider |
| HBase_1_1_2_ClientService | Syslog5424Reader |
| HBase_1_1_2_ListLookupService | SyslogReader |
| HBase_1_1_2_RecordLookupService | UDPEventRecordSink |
| HBase_2_ClientMapCacheService | VolatileSchemaCache |
| HBase_2_ClientService | WindowsEventLogReader |
| HBase_2_RecordLookupService | XMLReader |
| Hive3ConnectionPool | XMLRecordSetWriter |
| HiveCatalogService | |
| HiveConnectionPool | |
| HortonworksSchemaRegistry | |
| IPFIXReader | |
| IPLookupService | |

Related Information

[Supported NiFi Registry databases](#)

[Supported NiFi processors](#)

[Supported NiFi reporting tasks](#)

[Components supported by partners](#)

Supported NiFi reporting tasks

Cloudera Flow Management (CFM) is shipped with Apache NiFi and includes a set of reporting tasks, most of which are supported by Cloudera. You should be familiar with the available supported reporting tasks, and avoid using any unsupported reporting tasks in production environments.

Additional reporting tasks are developed and tested by the Cloudera community but are not officially supported by Cloudera. Reporting tasks are excluded for a variety of reasons, including insufficient reliability or incomplete test case coverage, declaration of non-production readiness by the community at large, and feature deviation from Cloudera best practices. Do not use these features in your production environments.

- `AmbariReportingTask`
- `ControllerStatusReportingTask`
- `MetricsEventReportingTask`
- `MonitorDiskUsage`
- `MonitorMemory`
- `PrometheusReportingTask`
- `QueryNiFiReportingTask`
- `ReportLineageToAtlas`
- `ScriptedReportingTask`
- `SiteToSiteBulletinReportingTask`
- `SiteToSiteMetricsReportingTask`
- `SiteToSiteProvenanceReportingTask`
- `SiteToSiteStatusReportingTask`

Related Information

[Supported NiFi Registry databases](#)

[Supported NiFi processors](#)

[Supported NiFi controller services](#)

[Components supported by partners](#)

Supported NiFi parameter providers

Cloudera Flow Management (CFM) is shipped with Apache NiFi and includes a set of parameter providers, most of which are supported by Cloudera. You should be familiar with the available supported parameter providers, and avoid using any unsupported parameter providers in production environments.

Additional parameter providers are developed and tested by the Cloudera community but are not officially supported by Cloudera. Parameter providers are excluded for a variety of reasons, including insufficient reliability or incomplete test case coverage, declaration of non-production readiness by the community at large, and feature deviation from Cloudera best practices. Do not use these features in your production environments.

- `AwsSecretsManagerParameterProvider`
- `AzureKeyVaultSecretsParameterProvider`
- `DatabaseParameterProvider`
- `EnvironmentVariableParameterProvider`
- `FileParameterProvider`
- `GcpSecretManagerParameterProvider`
- `HashiCorpVaultParameterProvider`

Components supported by partners

Learn about the processors and controller services built and supported by Cloudera partners.

These components are not officially supported by Cloudera even though Cloudera Quality Engineering teams added test coverage for them.

Processors supported by partners

- ConsumePulsar (v1.18.0)
- ConsumePulsarRecord (v1.18.0)
- PublishPulsar (v1.18.0)
- PublishPulsarRecord (v1.18.0)

Controller services supported by partners

- PulsarClientAthenzAuthenticationService (v1.18.0)
- PulsarClientJwtAuthenticationService (v1.18.0)
- PulsarClientOAuthAuthenticationService (v1.18.0)
- PulsarClientTlsAuthenticationService (v1.18.0)
- StandardPulsarClientService (v1.18.0)

These components can be used to push data into Apache Pulsar as well as getting data out of it. In case you have issues or questions while using these components, Cloudera recommends you to reach out to your StreamNative representative team.

Related Information

[Supported NiFi Registry databases](#)

[Supported NiFi processors](#)

[Supported NiFi controller services](#)

[Supported NiFi reporting tasks](#)

Download locations

You can download the Cloudera Flow Management (CFM) software artifacts from the Cloudera Archive. There are different CFM artifacts for different operating systems, standalone components, and Windows files.

Use the following tables to identify the Cloudera Flow Management (CFM) repository location for your operating system and operational objectives.



Note:

You must have credentials to download CFM files. Your download credential is not the same as the credential you use to access the Cloudera Support Portal.

You can get download credentials in the following ways:

- Contact your Cloudera sales representative.
- Check the Welcome email you have received for your Flow Management account.
- File a non-technical case on the [Cloudera Support Portal](#) for the Cloudera Support team to assist you.

Table 1: RHEL/CentOS 7

| File | Location |
|-----------------|---|
| Manifest | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/parcel/manifest.json |
| Parcel | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/parcel/CFM-2.1.5.3000-3-el7.parcel |
| Parcel sha file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/parcel/CFM-2.1.5.3000-3-el7.parcel.sha |
| CSD | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/parcel/NIFI-1.18.0.2.1.5.3000-3.jar |
| | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/parcel/NIFIREGISTRY-1.18.0.2.1.5.3000-3.jar |

Table 2: RHEL/CentOS 8

| File | Location |
|-----------------|---|
| Manifest | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat8/yum/tars/parcel/manifest.json |
| Parcel | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat8/yum/tars/parcel/CFM-2.1.5.3000-3-el8.parcel |
| Parcel sha file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat8/yum/tars/parcel/CFM-2.1.5.3000-3-el8.parcel.sha |
| CSD | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat8/yum/tars/parcel/NIFI-1.18.0.2.1.5.3000-3.jar |
| | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat8/yum/tars/parcel/NIFIREGISTRY-1.18.0.2.1.5.3000-3.jar |

Table 3: SLES 12

| File | Location |
|-----------------|---|
| Manifest | https://archive.cloudera.com/p/cfm2/2.1.5.3000/sles12/yum/tars/parcel/manifest.json |
| Parcel | https://archive.cloudera.com/p/cfm2/2.1.5.3000/sles12/yum/tars/parcel/CFM-2.1.5.3000-3-sles12.parcel |
| Parcel sha file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/sles12/yum/tars/parcel/CFM-2.1.5.3000-3-sles12.parcel.sha |
| CSD | https://archive.cloudera.com/p/cfm2/2.1.5.3000/sles12/yum/tars/parcel/NIFI-1.18.0.2.1.5.3000-3.jar |
| | https://archive.cloudera.com/p/cfm2/2.1.5.3000/sles12/yum/tars/parcel/NIFIREGISTRY-1.18.0.2.1.5.3000-3.jar |

Table 4: Ubuntu 18

| File | Location |
|-----------------|---|
| Manifest | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu18/apt/tars/parcel/manifest.json |
| Parcel | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu18/apt/tars/parcel/CFM-2.1.5.3000-3-bionic.parcel |
| Parcel sha file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu18/apt/tars/parcel/CFM-2.1.5.3000-3-bionic.parcel.sha |
| CSD | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu18/apt/tars/parcel/NIFI-1.18.0.2.1.5.3000-3.jar |
| | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu18/apt/tars/parcel/NIFIREGISTRY-1.18.0.2.1.5.3000-3.jar |

Table 5: Ubuntu 20

| File | Location |
|-----------------|---|
| Manifest | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu20/apt/tars/parcel/manifest.json |
| Parcel | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu20/apt/tars/parcel/CFM-2.1.5.3000-3-focal.parcel |
| Parcel SHA file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu20/apt/tars/parcel/CFM-2.1.5.3000-3-focal.parcel.sha |
| CSD | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu20/apt/tars/parcel/NIFI-1.18.0.2.1.5.3000-3.jar |
| | https://archive.cloudera.com/p/cfm2/2.1.5.3000/ubuntu20/apt/tars/parcel/NIFIREGISTRY-1.18.0.2.1.5.3000-3.jar |

Table 6: Standalone components (OS agnostic)

| File | Location |
|-----------------------|---|
| NiFi (.tar.gz) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/cdf_extensions/nifi-1.18.0.2.1.5.3000-3-bin.tar.gz |
| NiFi (.tar.gz.sha256) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/cdf_extensions/nifi-1.18.0.2.1.5.3000-3-bin.tar.gz.sha256 |

| File | Location |
|--------------------------------|---|
| NiFi Registry (.tar.gz) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/nifi/nifi-registry-1.18.0.2.1.5.3000-3-bin.tar.gz |
| NiFi Registry (.tar.gz.sha256) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/nifi/nifi-registry-1.18.0.2.1.5.3000-3-bin.tar.gz.sha256 |
| NiFi Toolkit (.tar.gz) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/nifi/nifi-toolkit-1.18.0.2.1.5.3000-3-bin.tar.gz |
| NiFi Toolkit (.tar.gz.sha256) | https://archive.cloudera.com/p/cfm2/2.1.5.3000/redhat7/yum/tars/nifi/nifi-toolkit-1.18.0.2.1.5.3000-3-bin.tar.gz.sha256 |

Table 7: Windows files

| File | Location |
|-------------------|---|
| NiFi MSI | https://archive.cloudera.com/p/cfm2/2.1.5.3000/windows/nifi-2.1.5.3000-3.msi |
| NiFi MSI SHA file | https://archive.cloudera.com/p/cfm2/2.1.5.3000/windows/nifi-2.1.5.3000-3.msi.sha256 |

Unsupported features

The following features are developed and tested by the Cloudera community but are not officially supported by Cloudera. These features are excluded for a variety of reasons, including insufficient reliability or incomplete test case coverage, declaration of non-production readiness by the community at large, and feature deviation from Cloudera best practices. Do not use these features in your production environments.

Unsupported customizations

Cloudera cannot guarantee that default NiFi processors are compatible with proprietary protocol implementations or proprietary interface extensions. For example, Cloudera supports interfaces like JMS and JDBC that are built around standards, specifications, or open protocols, but does not support customizations of those interfaces, or proprietary extensions built on top of those interfaces.

Technical preview features

The following features are available in Cloudera Flow Management (CFM) 2.1.5 SP1 but are not ready for production deployment. Cloudera encourages you to explore these technical preview features in non-production environments and provide feedback on your experiences through the [Cloudera Community Forums](#).

- Controller Services:
 - StandardSnowflakeIngestManagerProviderService
- Processors:
 - GetSnowflakeIngestStatus
 - PutRedisHashRecord
 - PutSnowflakeInternalStage
 - StartSnowflakeIngest
 - UpdateDeltaLakeTable

Behavioral changes

Learn about behavioral changes in Cloudera Flow Management (CFM) 2.1.5.

Behavioral changes in CFM 2.1.5 SP2

Summary: ScriptedTransformRecord processor requires proper schema name attribute for record writer

NIFI-11523 introduced a fix that ensures the ScriptedTransformRecord processor uses the correct schema defined for the record writer. Previously, if the schema name attribute was set in the writer but not in the flow, it was ignored, defaulting to the reader schema. This behavior has been corrected, which may cause the processor to fail after upgrading if the schema name attribute is not set in the flow.

The failure is typically logged as:

```
org.apache.nifi.schema.access.SchemaNotFoundException: ${schema.name} did not provide appropriate Schema Name
```

To prevent failures, ensure that the schema name attribute is properly configured in the flow or match it to the schema defined for the record reader for identical behavior.

Behavioral changes in CFM 2.1.5

Summary: Incompatible changes in schema validation in Avro 1.11

In Avro, when a schema is present, all required fields are defined by the schema. If a field is missing in the input data, a `java.lang.NullPointerException` is raised. Conversely, when there is an extra field in the input data not defined by the schema, the field is ignored, and the `RecordWriter` excludes it from serialization.

Avro 1.11 has introduced a more strict schema validation, which leads to changes in default value handling. This change might impact existing flows. In previous Avro versions, you could set the default value of a complex type as `null` to indicate that it is not required.

However, with Avro 1.11 introduced, if a field is missing, parsing fails with `org.apache.avro.AvroTypeException`. To address this, it is now necessary to specify `null` as a valid type in the schema before you can assign it as a default value.

Summary: Change in default encryption algorithm for NiFi sensitive properties

In CFM 2.1.5, the default algorithm used for encrypting NiFi sensitive properties in the NiFi flow configuration file has been updated to enhance encryption security.

If you are using Cloudera Manager to upgrade to CFM 2.1.5, this algorithm change is managed automatically.

If you are manually migrating the NiFi files to a new CFM 2.1.5 cluster, you are required to update the encryption algorithm. For instructions, see *Updating encryption algorithm for sensitive properties*.

Related Information

[Updating encryption algorithm for sensitive properties](#)

Known issues

Review the list of known issues in Cloudera Flow Management (CFM) 2.1.5.

Truststore changes with Ranger Plugin causing TLS handshake errors

When using the Ranger plugin, the default truststore is changed from cacerts to AutoTLS truststore (cm-auto-global_truststore.jks). This can lead to unintended issues such as TLS handshake errors with common CAs. Connections with common CAs may fail, causing service outages because the AutoTLS truststore contains only internal CA certificates and not the public root certificates.

Add the required certificates manually to the Cloudera Manager truststore.

1. Open Cloudera Manager and navigate to Administration Security Update Auto-TLS Truststore .
2. Import the certificates in PEM format.

NiFi UI becomes unavailable when a bulletin is generated at Flow Controller level in CFM 2.1.5 SP2

In CFM 2.1.5 SP2, when a bulletin is generated at the Flow Controller level, for example, in the context of reporting tasks or due to a disconnected node, the NiFi UI becomes unresponsive and is stuck with a loading spinner. The UI remains inaccessible until the bulletin at the Flow Controller level is cleared. A generated bulletin persists for 5 minutes after being generated.

While the issue has been successfully addressed in [NIFI-11560](#), the fix is not included in CFM 2.1.5 SP2. To resolve this problem, upgrade to CFM 2.1.5 SP3, which incorporates the necessary fix.

Configuration of java.arg.7

A property has been added for defining java.arg.7 to provide the ability to override the default location of the temporary directory used by JDK. By default this value is empty in Cloudera Manager. If you use this argument for another purpose, change it to a different, unused argument number (or use letters instead: java.arg.mycustomargument). Not changing the argument can impact functionalities after upgrades/migrations.

JDK error

JDK 8 version u252 is supported. Any lower version may result in this error when NiFi starts:

```
SHA512withRSAandMGF1 Signature not available
```

When using Java 8, only version u252, and above are supported.

JDK limitation

JDK 8u271, JDK 8u281, and JDK 8u291 may cause socket leak issues in NiFi due to JDK-8245417 and JDK-8256818. Verify the build version of your JDK. Later builds are fixed as described in [JDK-8256818](#).

When using Java 8, only version u252, and above are supported.

KafkaRecordSink puts multiple records in one message

All records are sent as a single Kafka message containing an array of records.

For more information, see [NIFI-8326](#).

There is no workaround for this issue.

Kudu Client

There is an issue in the Kudu client preventing the creation of a new tables using the NiFi processors. The table needs to exist before NiFi tries to push data into it. You may see this error when this issue arises:

```
Caused by: org.apache.kudu.client.NonRecoverableException: failed
to wait for Hive Metastore notification log listener to catch
up: failed to retrieve notification log events: failed to open
Hive Metastore connection: SASL(-15): mechanism too weak for
this user
```

Verify the necessary table exists in Kudu.

NiFi Node Connection test failures

Cloudera Manager includes a new health check feature. The health check alerts users if a NiFi instance is running but disconnected from the NiFi cluster. For this health check to be successful, you must update a Ranger policy. There is a known issue when the NiFi service is running but the NiFi Node(s) report Bad Health due to the NiFi Node Connection test.

Update the policy:

1. From the Ranger UI, access the Controller policy for the NiFi service.
2. Verify the `nifi` group is set in the policy.
3. Add the `nifi` user, to the policy, with READ permissions.

NiFi UI Performance considerations

A known issue in Chrome 92.x causes significant slowness in the NiFi UI and may lead to high CPU consumption.

For more information, see the *Chrome Known Issues documentation* at [1235045](#).

Use another version of Chrome or a different browser.

SSHJ version change and key negotiation issue with old SSH servers

ListSFTP and PutSFTP processors fail when using the legacy `ssh-rsa` algorithm for authentication with the following error:

```
UserAuthException: Exhausted available authentication methods
```

Set Key Algorithms Allowed property in PutSFTP to `ssh-rsa`.

KeyStoreException: placeholder not found

After an upgrade, NiFi may fail to start, displaying the following error:

```
WARN org.apache.nifi.web.server.JettyServer: Failed to start web
server... shutting down.
java.security.KeyStoreException: placeholder not found
```

The error is caused by missing configuration for the type of the keystore and truststore files.

1. Go to Cloudera Manager -> NiFi service -> Configuration.
2. Add the below properties for NiFi Node Advanced Configuration Snippet (Safety Valve) for `staging/nifi.properties.xml`.

```
nifi.security.keystoreType=**[value]**
nifi.security.truststoreType=**[value]**
```

Where value must be PKCS12, JKS, or BCFKS. JKS is the preferred type, BCFKS and PKCS12 files are loaded with BouncyCastle provider.

3. Restart NiFi.

InferAvroSchema may fail when inferring schema for JSON data

In Apache NiFi 1.17, the dependency on Apache Avro has been upgraded to 1.11.0. However, the InferAvroSchema processor depends on the `hadoop-libraries` NAR from which the Avro version comes from, causing a `NoSuchMethodError` exception.



Important: This processor is not supported by Cloudera and its use is highly discouraged as inferring a schema from the data is not recommended in production data flows.

Having well defined schemas ensures consistent behavior, allows for proper schema versioning and prevents downstream systems to generate errors because of unexpected schema changes. Besides, schema inference may not always be 100% accurate and can be an expensive operation in terms of performances.

Use the ConvertRecord processor and have the Record Writer write the schema as a FlowFile attribute.

Fixed issues

Review the list of resolved issues.

Issues fixed in CFM 2.1.5 SP3



Note: On November 2, 2023, Cloudera released Service Pack 3 for CFM 2.1.5. Upgrade to CFM 2.1.5.3000 to access the latest version of the software. You can find the new download links in [Download locations](#).

- NIFI-11560 Bulletin causes UI to think it cannot refresh

Issues fixed in CFM 2.1.5 SP2



Note: On October 11, 2023, Cloudera released Service Pack 2 for CFM 2.1.5. If you are using CFM 2.1.5.0 or CFM 2.1.5.1000, upgrade to CFM 2.1.5.2000 to access the latest version of the software. You can find the new download links in [Download locations](#).

- NIFI-12010 Handle auto-commit and commit based on driver capabilities in SQL components
- NIFI-11898 Handle commit based on driver capabilities in PutDatabaseRecord
- NIFI-11672 Adjusted ListSFTP to handle incomplete File Types
- NIFI-11987 Set read buffer size in PutAzureBlobStorage_v12
- NIFI-11981 PublishGCPubSub failure / Record-based processing / AVRO
- NIFI-11926 Added proxy handling in Azure Storage Credentials Services
- NIFI-11586 Added AzureStorageCredentialsControllerServiceLookup_v12
- NIFI-11585 Added ADLSCredentialsControllerServiceLookup
- NIFI-11325 Upgraded Mockito from 3.12.4 to 4.11.0
- NIFI-11758 Added FileResourceService and used it in PutAzure*Storage processors for local file upload
- NIFI-11360 Switched Optional.isEmpty to Optional.isPresent for Java 8
- NIFI-11360 Added Client-Side Encryption for Azure Blob v12 Processors
- NIFI-10721 Avoid querying properties after Azure Blob upload
- NIFI-10491 Added Conflict Resolution Strategy to PutAzureBlobStorage_v12
- NIFI-11779 Override endpoint in PutBigQuery
- NIFI-11338 Upgraded Spring Vault Core from 2.3.2 to 2.3.3
- NIFI-11478 Upgraded Spring Framework from 5.3.26 to 5.3.27
- NIFI-11320 Upgraded Spring Framework from 5.3.24 to 5.3.26
- NIFI-11553 Add Record handling and more Properties for GCP PubSub
- NIFI-10887 Addressed performance concerned, use String.indexOf() instead of Pattern.matcher() when using Literal Replace
- NIFI-11584 Improved MergeContent stream handling
- NIFI-11557 Fixed error with Java 11 code
- NIFI-11557 Avoid using the expensive and unnecessary Files.walkFileTree
- NIFI-5151 Add UPSERT support for Apache Phoenix
- NIFI-10780 Improved Event Server to avoid dropping messages
- NIFI-11439 Corrected GCS Transit URI for custom Storage API URL
- NIFI-11439 Corrected Checkstyle violation on GCS Property
- NIFI-11439 Added Storage API URL property to GCS Processors
- NIFI-11408 Enable user to disable gzip compression with PutGCSObject
- NIFI-11461 Improve User and Group Tenants Search
- NIFI-11920 Improved JDBC and JNDI JMS Connection URL Validation

- NIFI-11744 Added Required Permission to Reference Remote Resources
- NIFI-12034 Upgraded Apache Commons Compress from 1.23.0 to 1.24.0
- NIFI-12083 Upgraded Jetty from 9.4.51 to 9.4.52
- NIFI-11376 Upgraded Jetty from 9.4.50 to 9.4.51
- NIFI-10995 Update Jetty to 9.4.50.v20221201
- NIFI-12063 Clarified Elasticsearch Query Documentation
- NIFI-12037 Changed List.of to Collections.singletonList for Java 8
- NIFI-12037 Update AzureUserGroupProvider to allow configuration of the graph endpoint and API scope to support regional clouds
- NIFI-11944 Removed validation warning from ExecuteStreamCommand
- NIFI-11524 Improved ExecuteStreamCommand documentation and configuration
- NIFI-11896 Corrected backported changes for QuestDB 6
- NIFI-11896 Corrected QuestDB Status Repository Shutdown handling
- NIFI-11853 Changed Embedded QuestDB Tests to use JUnit5 TempDir
- NIFI-10877 Converted more nifi-framework-core tests from JUnit 4 to 5
- NIFI-11587 Update questdb to 6.7
- NIFI-11902 Fix ListHDFS closes FileSystem in first run
- NIFI-11817 Improve ListHDFS extensibility
- NIFI-11178 Improve ListHDFS performance, incremental loading refactor
- NIFI-11845 Added support for migrating H2 2.1 and 1.4 to 2.2
- NIFI-8128 Added Sentinel Password to Redis Service
- NIFI-11536 Corrected Keystore and Truststore auto-reloading
- NIFI-11761 Fixed MiNiFi restart issue when graceful shutdown period expires. MiNiFi restart sends bootstrap to background
- NIFI-10729 Added Cassandra testcontainers.
- NIFI-11430 PaginatedJsonQueryElasticsearch processors improvements
- NIFI-11034 Restore image viewer to nifi-assembly
- NIFI-10865 Allow RecordPath's unescapeJson to convert de-serialised JSON Objects into Records
- NIFI-10970 Added a count RecordPath function
- NIFI-11483 Correctly use DescribedValue for JsonQueryElasticsearch
- NIFI-10844 Allow _source only output for GetElasticsearch and JsonQueryElasticsearch
- NIFI-5642 QueryCassandra processor improvements
- NIFI-12019 bugfix for SynchronousFileWatcher time check interval
- NIFI-11519 Fixed DBCPConnectionPool Sensitive Dynamic Properties
- NIFI-11976 Removed error log check in TestListenTCPRecord
- NIFI-11971 Ensure that when creating a new content claim that an existing claim length of -1 is always treated as 0, to ensure never at offset -1 to offset
- NIFI-11922 Honor catalog/schema field in UpdateDatabaseTable
- NIFI-11918 Used java.security.cert in ListenGRPC
- NIFI-11913 Added enum handling to StandardSchemaValidator
- NIFI-11823 Fix NUMERIC support in PutBigQuery
- NIFI-11899 Correct Bulletin Metrics Registry to return latest Bulletins
- NIFI-11900 Catch RuntimeException in ResizeImage failures
- NIFI-11860 fixed bug in ResultSetRecordSet affecting decimalScale when resultSetScale was zero
- NIFI-11828 Confluent Schema Encoding Access Strategy - Schema ID versus Schema Version ID
- NIFI-11854 Boolean formatting in ConvertExcelToCSV
- NIFI-11837 When a queue starts swapping out data, it never stops
- NIFI-11783 Fixed a bug in which a FlowFile split into multiple and then removed did not properly handle retries when one of the outputs was retried
- NIFI-11814 Optimized Cluster Replication Component status evaluation

- NIFI-11825 Fixed QueryRecord closing of resources
- NIFI-11794 Fix NPE + configure max attempts for Redis State Provider
- NIFI-11434 Added support for optionally allowing zip entries with data descriptors
- NIFI-11741 Added Guava dependency to Ranger assembly includes
- NIFI-7016 Fix Groovy File functions available for FlowFile in ExecuteGroovyScript
- NIFI-11682 Correct Quoting for UPSERT and INSERT_IGNORE keys in PutDatabaseRecord
- NIFI-11699 Fixed dynamic properties in SnowflakeComputingConnectionPool
- NIFI-11691 Support VARBINARY and LONGVARBINARY in PutDatabaseRecord
- NIFI-11680 Corrected Buffer Size Calculation for Connection Balancing
- NIFI-11681 Terminate Process Sessions before interrupting processor threads
- NIFI-11670 Refactored Content Repo OutputStream to create new Claim per FlowFile
- NIFI-11667 Provide default NiFi version when building dockerhub image
- NIFI-11647 Support UUID type in DataTypeUtils.getSQLTypeValue
- NIFI-11653 Added Connection URL Validation for Database Services
- NIFI-11593 Fixed hiding logic for properties
- NIFI-11464 Improvements for importing nested versioned flows
- NIFI-11628 Fixed Object[] and Throwable argument substitution in SimpleProcessLogger
- NIFI-11636 Do not buffer Parquet content into memory unnecessarily
- NIFI-11560 Bulletin causes UI to think it cannot refresh
- NIFI-11538 Fix primitive type conversion for PutIceberg
- NIFI-11614 Improved Validation for JndiJmsConnectionFactoryProvider
- NIFI-11591 Added additional logging for DynamicallyModifyClasspath system test
- NIFI-11591 Improved stability of DynamicallyClassPath and AsyncCommitCallback tests
- NIFI-11591 Corrected intermittent system test failures
- NIFI-11621 Inferring schema for JSON fails when there's a CHOICE of different ARRAY types
- NIFI-11608 Fixed Expression Language Evaluation in PutBigQuery
- NIFI-11596 Adjusting Swagger contract to cover RegistryClients as possible reference type for Controller Services
- NIFI-11615 Logging fixes in AMQP bundle
- NIFI-11369 Fixed Defragment strategy with optional fragment.count attribute in MergeContent
- NIFI-11392 NiFi does not stop gracefully when using CRON scheduling
- NIFI-11590 Missing Enum data type handling in FlowFileTable
- NIFI-11580 Use daemon threads in DistributedCacheClient for clean shutdown
- NIFI-11109 Allow registry client's class in flow.xml/json to not change
- NIFI-8326 Send records as individual messages in Kafka RecordSinks
- NIFI-11563 Allowing source connectables to be restarted on new connections in the StandardVersionedComponentSynchronizer
- NIFI-11566 Adding updateTimeout argument to parameter commands in CLI
- NIFI-11547 Fixed DBCPConnectionPool verification
- NIFI-11535 Transfer ConnectWebsocket connection configuration FlowFile to relationships
- NIFI-11544 Fixed REL_FAILURE usage in AbstractIcebergProcessor
- NIFI-11545 Fixed test-all-dbs for Registry integration tests
- NIFI-10756 Generate error message when processor and/or controller service is unable to transition to start and/or enabled state
- NIFI-11287 UI - Dependent properties are not detected for parameters
- NIFI-11493 Defaulted dynamically modified classpath fix
- NIFI-11523 Refining schema handling for ScriptedTransfromRecord
- NIFI-11436 Fix NPE during updateFlow when called from a replace request for a PG that is not under version control
- NIFI-11224 Refactor and FF attribute support in WHERE in QuerySalesforceObject.

- NIFI-11472 Check working directory after making directory in PutFTP
- NIFI-11475 Fixed missing jackson-dataformat-xml in nifi-azure-services-api
- NIFI-11402 PutBigQuery fix for case sensitivity and error handling
- NIFI-11437 Switched to StreamUtils.fillBuffer() for buffer, Improved EncryptContentPGP Content Type Detection
- NIFI-11422 Fixed stateless-assembly README typo
- NIFI-11342 HDFS processors fail to get ClassloaderIsolationKey at startup
- NIFI-10017 Increase JVM heap size for tls-toolkit
- NIFI-11301 Fixed typos in ISPEncryptIP and DistributeLoad
- NIFI-11817 Fix ListCDPObjStore after ListHDFS refactor
- CFM-3328 Added nifi-cdf-netflow-nar to nifi-assembly
- CFM-3488 Correct padding handling for ListenNetFlow Options Templates
- CFM-3328 Add ListenNetFlow Processor
- CFM-1822 Added ARM64 protoc binaries in nifi-cdf-grpc-bundle
- CFM-1822 Added nifi-cdf-grpc-nar to assembly
- CFM-3449 Add property with text field value to edit logback.xml via CM UI
- CFM-3385 Compare CSD and Parcel versions during NiFi start, in case CSD version is lower throw an error
- CFM-3441 Replace all 'echo' with 'log' function in CSD code
- CFM-3432 NiFi Registry start fails in case NiFi Registry installed on host with NiFi
- CFM-3241 CM alert on NiFi registry OOM

Issues fixed in CFM 2.1.5 SP1



Note: On April 12, 2023, Cloudera released Service Pack 1 for CFM 2.1.5. If you previously upgraded to CFM 2.1.5.0, upgrade to CFM 2.1.5.1000 to access the latest version of the software. You can find the new download links in [Download locations](#).

- NIFI-11367 Database DATE value displayed incorrectly in record output if timezone is GMT-X
- NIFI-11157 Doc update for scheduling strategy for MergeContent/Record
- NIFI-11363 Fixed precision number handling in Flow Encryption Commands
- NIFI-7190 CaptureChangeMySQL processor remove comments from normalized query
- NIFI-11356 Upgraded Nimbus JOSE JWT to 9.3.1
- NIFI-11347 Upgraded OWASP Dependency Check from 8.0.2 to 8.2.1
- NIFI-11329 Updated NAR Plugin to 1.5.0 and Commons Compress to 1.23.0
- NIFI-10580 Upgraded SLF4J from 1.7.36 to 2.0.6
- NIFI-11024 Update iceberg.version to 1.1.0
- NIFI-10796 Upgraded Apache Iceberg from 0.14.0 to 1.0.0
- NIFI-10651 Upgraded Iceberg transitive dependencies
- NIFI-11251 Fixed Nifi Registry Client with Nested PG - sync issue
- NIFI-11341 Fixed OutputStream.close() handling for Content Claims
- NIFI-11232 Fixed buffer handling in ContentClaimInputStream
- NIFI-10888 Improved performance of Record Readers when inferring schema of small FlowFiles
- NIFI-11332 Close Stream from Files.lines in StandardRuntimeManifestService
- NIFI-10915 Added field to runtime manifest to indicate presence of additionalDetails information
- NIFI-11291 Ensuring exceptional EventIterators are closed in PartitionedEventStore
- NIFI-11302 Corrected Registry version retrieval
- NIFI-11312 Rationalised Registry Docker scripts in one location
- NIFI-10978 Added LDAP_REFERRAL_STRATEGY to NiFi Docker
- NIFI-10923 Upgraded Apache SSHD to 2.9.2
- NIFI-11337 Update PutDatabaseRecord's Max Batch Size property documentation to reflect actual behavior
- NIFI-9196 Corrected FetchSFTP Move File destination formatting
- NIFI-11330 Restarting service referenced by parameter only when service is active

- NIFI-10917 Upgraded Spring Framework from 5.3.23 to 5.3.24
- NIFI-10934 Added uniqueness check for Registry Client creation
- NIFI-10744 Changed HashSet to LinkedHashSet in SegmentContent for deterministic handling
- NIFI-10901 PublishKafka headers not sent in ProducerRecord
- NIFI-10637 Deterministic TestGenerateTableFetch testMultipleColumnTypeMissing
- NIFI-9437 Flowfile Expiration cannot exceed 24 days
- NIFI-11290 Run Component Primary Node State changes in background thread
- NIFI-10332 Selected OIDC Logout method using Discovery URLs
- NIFI-11151 Improving code reusability of DBCP services
- NIFI-10949 Updated MongoDB components using current driver
- NIFI-10562 Moved MongoDB to testcontainers for integration-tests
- NIFI-10781 Made the MongoDB controller service implement VerifiableControllerService.
- NIFI-10718 Update mongo.driver.version to 4.7.2
- NIFI-11022 Added DecryptContent Compatibility Processors
- NIFI-10234 Added PutIoTDBRecord Processor
- NIFI-8111 Added JSLTTransformJSON Processor
- NIFI-11149 Added PutRedisHashRecord Processor
- NIFI-11263 Added case-insensitive and order independent field mapping to PutIceberg record converter
- NIFI-10677 Added Choice data type handling to Iceberg record converter
- NIFI-11296 Improved code reusability of GRPC modules
- NIFI-11260 Added STS SSL Context Service for AWS Credentials Provider
- NIFI-11011 Updated AWS SDK versions to 1.12.371 and 2.17.295
- NIFI-10792 Replaced PrintStream with OutputStream for Java 8
- NIFI-10792 Updated ConvertExcelToCSV to handle files over 10 MB
- NIFI-11085 Updated graphics2d to 0.42
- NIFI-10921 Upgraded Apache POI from 5.2.2 to 5.2.3
- NIFI-11305 Fixed out-of-order handling of binlog client shutdown in CaptureChangeMySQL
- NIFI-6501 Refactored CaptureChangeMySQL with bounded queue of 1000
- NIFI-11279 Allow event stream processing to continue in CaptureChangeMySQL after sync issue
- NIFI-11094 Allow CaptureChangeMySQL to send multiple events per FlowFile
- NIFI-10899 Added SameSite Policy to Application Cookies
- NIFI-10897 Replaced Spring Security Base64 with java.util.Base64
- NIFI-7823 Added groups mapping from OIDC token claim
- NIFI-11190 Added provenance events to GetHubSpot and GetShopify
- NIFI-10711 Made the script runner more debuggable.
- NIFI-11158 PutSalesforceObject processor improvements
- NIFI-11123 Fixed default value and update docs
- NIFI-11107 In ConsumeIMAP and ConsumePOP3 added support for OAUTH based authorization.
- NIFI-11150 Added Service Account JSON credentials support to Google Pub/Sub Lite processors
- NIFI-11210 Removed unused import from TestDistributedMapCacheClientService
- NIFI-11210 Added read timeout to DistributedMapCacheClientService
- NIFI-10618 Added Asana connector
- NIFI-11029 Added Standard XML parsing to ExtractCCDAAttributes
- NIFI-11036 Added Cluster Summary Metrics to Prometheus endpoint
- NIFI-11204 Added configurable retry logic for table commits in PutIceberg processor
- NIFI-10987 Added default implementation of AWS SDK V2 credentials in AWSCredentialsProviderService
- NIFI-11323 Fixed last modified change detection of dynamicallyModifiesClasspath resources
- NIFI-11213 Showing version change in older (pre 1.18.0) contained version flows properly
- NIFI-11269 Added snappy-java to nifi-avro-processors
- NIFI-11252 Added OIDC Client Secret to sensitive Registry properties

- NIFI-11289 Avoid obtaining read locks on queues when fetching Group Status, except in those few specific situations where it's needed.
- NIFI-11285 Unable to build module created by maven archetype plugin
- NIFI-11274 Only add @timestamp to PutElasticsearchRecord document if not null
- NIFI-5501 Fixed classloader issue leading to multiple abandoned threads
- NIFI-11310 Provide appropriate classpath resources to the ReloadComponent when a processor is terminated
- NIFI-11261 Added Primary Node State handling to GetAzureEventHub
- NIFI-11234 Fixed RecordWriter NPE in QuerySalesforceObject
- NIFI-11219 Set Qpid Proton J 0.34.0 for Azure EventHubs
- NIFI-11141 Upgraded Azure SDK BOM from 1.2.6 to 1.2.9
- NIFI-11042 Update msal4j to 1.13.3
- NIFI-11192 Ensured that if ports moved between parent/child group in between flow versions that we can properly handle that
- NIFI-11189 Restarting NiFi after failing to upgrade flow can cause NiFi to fail startup
- NIFI-11176 FlowSynchronizationIT System Tests Failing
- NIFI-11159 Fixed connections with source having reassigned id
- NIFI-11100 Limiting scope of external controller services during version sync to services outside the versioning context
- NIFI-10802 Apply bundle updates before properties in component synchronizer
- NIFI-11117 Removed folder creation from PutGoogleDrive
- NIFI-11047 Issue when upgrading version of dataflow with external service
- NIFI-10979 Additional nifi-framework upgrades from JUnit 4 to 5
- NIFI-10969 Created extension point for Signer Override in AWS S3 processors
- NIFI-10349 Added maximum object age property to list s3
- NIFI-10876 Converted some nifi-framework tests from JUnit 4 to JUnit 5
- NIFI-11049 Fixed flaky PutDropboxTest, attribute description corrected
- NIFI-10991 Added AWS MSK IAM support to Kafka processors
- NIFI-11068 Introduced ConflictResolutionStrategy enum
- NIFI-11069 PutDropbox: remove upload cancellation, unify conflict resolution naming
- NIFI-10866 Refactored Kafka 1.0 and 2.0 using nifi-kafka-shared
- NIFI-11045 Sensitive dynamic property support for parameterized queries in ExecuteSQL and ExecuteSQLRecord
- NIFI-10965 PutGoogleDrive
- NIFI-10953 Implement GCP Vision AI processors
- NIFI-11059 PutBoxFile processor
- NIFI-10868 PutDropbox processor
- NIFI-10966 Added option to QuerySalesforceObject to run custom query
- NIFI-11147 Query all fields in QuerySalesforceObject
- NIFI-10832 Create PutSalesforceRecord processor
- NIFI-10980 Corrected ordering of property descriptor allowable values
- NIFI-10916 Controller Service allowable values dropdown list should be sorted
- NIFI-11305 Fix logic to correctly stop CaptureChangeMySQL
- NIFI-10663 Synchronizer should consider stopping Processors that are Starting
- NIFI-10971 Improved edge case handling while fetching objects using Azure Key Vault Client and added unit tests
- NIFI-9697 Implemented AzureKeyVaultSecretsParameterProvider and AzureKeyVaultCredentialsService; Implemented unit tests as well as the documentation for the Parameter Provider
- NIFI-10981 Ensure NarAutoLoader starts after provider retrieves NARs
- NIFI-10919 Corrected SCRAM SASL Mechanism for Kafka Components
- NIFI-10819 Restricted IndiLoginModule for Kafka JAAS Config
- NIFI-10617 Added missing DynamicProperty annotation to processors that use them

- NIFI-11262 Corrected scope for bcprov-jdk18on in nifi-security-kerberos
- NIFI-4718 Improved detection of FlowFile V3 in IdentityMimeType
- NIFI-11247 Using parameterContextName instead of group name when fetching parameters
- NIFI-11238 Creating missing parameter providers when importing inherited provided contexts
- NIFI-11134 Added Label auditing to Flow Configuration History
- NIFI-11209 Include newly-added columns in output for UpdateTable processors when Update Field Names is true
- NIFI-11156 Updated SchemaValidator to include error message for ValidateXml
- NIFI-11118 When changing version of a versioned flow, ensure that Version Control Information's StorageLocation is properly set for NiFi Registry client to maintain backward compatibility
- NIFI-11092 Fixed ConsumeTwitter handling on Primary Node changes
- NIFI-11133 Updated TLS Toolkit Standalone to set Client Key Password
- NIFI-10846 Added SMB Dialect and Use Encryption properties in SMB processors
- NIFI-11122 Corrected provided parameter context inheritance after creation
- NIFI-11126 Delete dMultiPart files in ListenHTTP after processing
- NIFI-8005 Added warning message for Excel sheets not found
- NIFI-11112 Corrected location of additionalDetails for GetZendesk
- NIFI-9989 Upgraded SSHJ from 0.34.0 to 0.35.0
- NIFI-10973 Introduced differentiation of comparing embedded versioned flows for UI and synchronization purposes
- NIFI-11064 Removed unstable TestPutSFTP.testRunTransitUriDifferentHosts and changed TestPutSFTP run iterations based on files queued
- NIFI-10884 Log target filename
- NIFI-10967 Corrected TestWriteJsonResult mixed arrays
- NIFI-11110 Create processor for triggering HMS events
- NIFI-10791 Added AWS SDK v2 support to AWSCredentialsProviderControllerService
- NIFI-11124 Added hadoop.file.url attribute to HDFS processors
- NIFI-6428 Added 'inTransaction' value to state, fix bug
- NIFI-7190 CaptureChangeMySQL processor remove comments from normalized query
- NIFI-9920 Fetching all bulletins of a process group on update process group
- NIFI-10177 NiFi Registry logout via OIDC
- NIFI-10188 Added jaxws-api for ConsumeEWS on Java 11
- NIFI-10449 Fixed ScriptedLookupServices reloading
- NIFI-10576 Added onFinishRecordSet implementation for WriteParquetResult
- NIFI-10608 Process Group copies include non-processor referenced controller services
- NIFI-10656 Log ignored event with info instead of warning
- NIFI-10703 Updated VersionedDataflow to support MaxEventDrivenThreadCount
- NIFI-10705 Primary keys were not being included in ConvertJSONToSQL UPDATE queries when 'User statement.type Attribute' was used
- NIFI-10751 Added Username to User and Group CRUD
- NIFI-10772 Clarify logs on shutdown where controller service and/or processor were unable to properly start
- NIFI-10812 Removed duplicate record template creation from Iceberg record converter
- NIFI-10815 Fixed initial internal yield duration when processor created
- NIFI-10818 Fixed bug in which oldest bin in MergeContent was not being evicted in order to make room for a new bin when using a correlation attribute
- NIFI-10834 Updated TestPutSplunkHTTP to avoid non-deterministic tests
- NIFI-10845 JsonQueryElasticsearch processors are not outputting an empty flow file for a combined response with output_no_hits set to true
- NIFI-10850 Fixed Query Parameters property in InvokeAWSGatewayApi should support FlowFile attributes in EL
- NIFI-10853 Allow UpdateAttribute dynamic property to validate nifi expressions
- NIFI-10862 Fix Flaky tests in TestXMLReader

- NIFI-10873 GenerateFlowFile: flowfiles in a batch are not unique
- NIFI-10875 Changed TestQuerySolr to check for path elements
- NIFI-10882 Set credentials for ElasticsearchClientService based on AuthorizationScheme
- NIFI-10890 Replaced HashMap with LinkedHashMap in JsonRowRecordReader
- NIFI-10891 Replaced HashMap with LinkedHashMap in BinFiles
- NIFI-10925 Refactored TestPutSFTP with discrete test methods
- NIFI-10928 Updated MockFlowFile with LinkedHashMap for attributes
- NIFI-10932 Changed PKCS12 KeyStore Type Provider to SunJSSE
- NIFI-10956 Fixed inference issues with mixed arrays
- NIFI-10958 Adjusted Script Engine handling to avoid exceptions
- NIFI-10974 Incorrect warning message on memory usage from MonitorMemory
- NIFI-10988 Fixed ConsumeGCPubSubLite processors delivering incorrect messages
- NIFI-10989 Removed SHA-1 and MD5 from TestHashContent
- NIFI-10993 PublishKafkaRecord should use correct record schema
- NIFI-10997 Ensure auditing of process group / controller service operations
- NIFI-10998 Fixed SplitJson to always compile new JsonPath when property changes
- NIFI-11001 Incorrect Local Changes shown when upgrading from 1.18.0 to 1.19.1
- NIFI-11028 Handle controller service 'Scheduled State' change
- NIFI-11032 Addressing NPE when retrieving registry client info with unauthorized user
- NIFI-11048 Added FileNameCompleter to avoid style parsing failures
- NIFI-11076 Resolving deadlock issue in StandardParameterContext
- NIFI-11089 Resolving previously resolved parameter providers when possible on version sync
- NIFI-11096 Added EncodeContent to Processor services definition
- NIFI-11097 Adjusted RegistryClientIT with unique name for Clients
- NIFI-11105 When mapping Parameter Context to VersionedParameterContext, don't bother mapping those that have already been mapped, as it is redundant
- CFM-1822 Handle custom schema in ListenGRPC
- CFM-2876 Added hadoop-cloud-storage dependency for RAZ and IDBroker
- CFM-3002 Added JIRA source connector
- CFM-2876 Added UpdateDeltaLakeTable processor
- CFM-3022 AWS S3/STS custom signer
- CFM-3137 Support new AWS SDK
- CFM-2805 Correcting okhttp client builder read timeout setting
- CFM-2463 CdpCredentialsProvider and CdpOauth2AccessTokenProvider Controller Services
- CFM-2462 Added connect and credentials retrieval timeout to AbstractIDBrokerCloudCredentialsProviderControllerService
- CFM-2512 Ensure cdf-extensions does not use log4j-core < 2.15.0
- CFM-2115 Setup SSLContext for IDBroker http client from provided configuration xmls

Issues fixed in CFM 2.1.5

CFM 2.1.5 is rebased against Apache NiFi 1.18.0. It includes all fixed issues of this Apache NiFi release as well as the below list:

- NIFI-10660: When converting Avro GenericRecord to a java Map, check GenericRecord's schema to see if the field exists before calling Record.get().
- NIFI-10937, NIFI-10938, NIFI-10939: When restoring flow from XML, properly parse XML for registry clients, looking for 'id' tag instead of 'identifier' tag. Fixed typo in error message about Reporting Task for Registry Clients. Updated StandardFlowComparator so that we compare sub-process groups' contents only if the Flow Coordinates are different by more than their version
- NIFI-10918: When fetching a flow from a Flow Registry, if it references any 'internal versioned flows' instead of requiring that a client is configured for the appropriate URL, attempt to fetch the flow from each client

- NIFI-10901: PublishKafka headers not sent in ProducerRecord
- NIFI-10914: Adjusting input check for loading nested versioned flows
- NIFI-5819: Support SQLServer sql_variant type
- NIFI-7862: Added UpdateDatabaseTable processor for auto table structure updates
- NIFI-10760: Added API Key authentication to ElasticSearchClientServiceImpl
- NIFI-9398: Added verification to ElasticSearchClientService (with integration tests) and Elasticsearch REST API processors
- NIFI-10801: Fixed hive metastore based tests in Iceberg processors
- NIFI-10871: Skipped CSRF processing for replicated HTTP requests
- NIFI-10874: Fixed issue with multiple levels of versioned flows
- NIFI-10817: Moved the calls in StandardProcessSession to 'resetState()' and 'acknowledgeRecords()' from the outer commit(boolean) to the inner commit(Checkpoint, boolean)
- NIFI-10814: Display description for selected flow
- NIFI-10851: Corrected removal of Controller Service references on property updates
- NIFI-10389: Added mime.type to GetShopify and GetHubSpot
- NIFI-10828: Adding new REST API endpoint for exposing versioned flow details
- NIFI-10793: Comment is not populated when process group is created via API
- NIFI-10762: Ranger Authorizer accepts multiple Ranger Admin Identity property values
- NIFI-10787: Cannot commit flows to NiFi Registry after updating our NiFi release to 1.18.0
- NIFI-10370: Create PutSnowflake processor using Snowpipe ingest
- NIFI-10775: Improve support for DescribedValue in PropertyDescriptor.Builder
- NIFI-10667: Added Private Key Service interface and implementation
- NIFI-10659: Extracted DBCP common code to nifi-dbc-base module for use in Snowflake NAR
- NIFI-9822: ConsumeKafkaRecord allows writing out Kafka record key
- NIFI-10737: Corrected ListenBeats buffer handling
- NIFI-4798: Allow empty value for UpdateAttribute property
- NIFI-10130: AzureGraphUserGroupProvider handles group with transitive members
- NIFI-10228: parse json flow using instanceIdentifier as the UUID
- NIFI-10287: ExecuteScript - Allow python scripts to use external modules
- NIFI-10637: Simplified Locale validation in ParseCEF
- NIFI-10675: Corrected SSL support in Neo4j V4 Cypher Service
- NIFI-10764 :Fixed handling BIT STRING in nifi-asn1-services
- NIFI-10767: When an empty line is encountered with Syslog Readers, just skip over the empty line instead of throwing an Exception
- NIFI-10768: Filter empty messages in ListenSyslog
- NIFI-10771: Add SINGLE_BATCH_PER_NODE to allowable values for flow file concurrency in ProcessGroupDTO
- NIFI-10783: Switched to LinkedHashMap for CompareFuzzyHash
- NIFI-10788: Ensure proposed service config is applied when component synchronizer adds a new service
- NIFI-10702: Clear server list on connection error in SMB processors
- NIFI-10698: Add filtering options to summary table
- NIFI-10680: Corrected Bouncy Castle references in optional profiles
- NIFI-10614: Upgraded Bouncy Castle from 1.70 to 1.71
- NIFI-10709: Showed log in link on logout complete page
- NIFI-10317: Taking care of NullPointerException if AMQP header value is null
- NIFI-9878: Added timeout handling for Cache Client handshaking
- NIFI-10303: Route GetElasticsearch to failure if _id is blank after attribute evaluation
- NIFI-10594: Render empty lines in Labels
- NIFI-10631: Changed HashMap to LinkedHashMap in TestHBase_2_ClientService
- NIFI-10635: Fixed handling of enums in PutDatabaseRecord

- NIFI-10641: Resolving typo on ParameterProvider warning message
- NIFI-10643: Paging secrets in AwsSecretsManagerParameterProvider
- NIFI-10668: Persist proxy password in remote process group
- NIFI-10674: Block evaluateELString from reading Parameters
- NIFI-10682: When determining effective property values, ensure that we always use the up-to-date version of Property Descriptors
- NIFI-10687: Set Elasticsearch document _id to null if ID attribute evaluated to blank String for PutElasticsearchRecord or PutElasticsearchJson
- NIFI-10689: Fixed Parameter Provider Name encoding in context dialog
- NIFI-10700: Only restart ports if their scheduledState is Running
- NIFI-10693: Removed proxy configuration properties from PutBigQuery
- NIFI-10673: Copy & paste of a child PG when parent is under Version Control duplicates Versioned Component IDs
- NIFI-10644: Added Message Demarcator-style processing in PublishMQTT
- NIFI-10650: Fixed demarcator is appended to the end of the FlowFile's content by ConsumeMQTT
- NIFI-10628: Added Default Schedule Time and Run Duration to processors
- NIFI-10567: Corrected Sensitive Dynamic Property handling for flow.xml
- NIFI-10648: Upgraded Apache Commons Text to 1.10.0
- NIFI-10442: Created PutIceberg processor
- NIFI-10602: Fixed GetHubSpot and GetShopify state handling on NiFi restart
- NIFI-10577: Fixed Sensitive Checkbox rendering for Fetch Parameters
- NIFI-10586: Prioritized ssh-rsa algorithm in SFTP Processors
- NIFI-10273: Supported file entries larger than 8.5GB for TAR in MergeContent
- NIFI-10597: Changed 'App Config File' property to external resource in Box processors
- NIFI-10543: Support broker failover in MQTT processors
- NIFI-10587: Missing exclude entry in nifi-registry assembly
- NIFI-10096: Corrected nested inherited Parameter Context loading

Fixed Common Vulnerabilities and Exposures

Review the list of fixed common vulnerabilities and exposures (CVEs).

CVEs fixed in CFM 2.1.5 SP2

CVE-2023-34212: Potential Deserialization of Untrusted Data with JNDI in JMS Components

The JndiJmsConnectionFactoryProvider Controller Service along with the ConsumeJMS and PublishJMS Processors, in Apache NiFi 1.8.0 through 1.21.0 allow an authenticated and authorized user to configure URL and library properties that enable deserialization of untrusted data from a remote location. The resolution validates the JNDI URL and restricts locations to a set of allowed schemes.

CVE-2023-34468: Potential Code Injection with Database Services using H2

The DBCPConnectionPool and HikariCPConnectionPool Controller Services in Apache NiFi 0.0.2 through 1.21.0 allow an authenticated and authorized user to configure a Database URL with the H2 driver that enables custom code execution. The resolution validates the Database URL and rejects H2 JDBC locations.

CVE-2023-36542: Potential Code Injection with Properties Referencing Remote Resources

Apache NiFi 0.0.2 through 1.22.0 include Processors and Controller Services that support HTTP URL references for retrieving drivers, which allows an authenticated and authorized user to configure a location that enables custom code execution. The resolution introduces a new Required Permission for referencing remote resources, restricting configuration of these components to

privileged users. The permission prevents unprivileged users from configuring Processors and Controller Services annotated with the new Reference Remote Resources restriction.

CVE-2023-40037: Incomplete Validation of JDBC and JNDI Connection URLs

Apache NiFi 1.21.0 through 1.23.0 support JDBC and JNDI JMS access in several Processors and Controller Services with connection URL validation that does not provide sufficient protection against crafted inputs. An authenticated and authorized user can bypass connection URL validation using custom input formatting. The resolution enhances connection URL validation and introduces validation for additional related properties.

CVEs fixed in CFM 2.1.5 SP1

CVE-2023-22832: Improper Restriction of XML External Entity References in ExtractCCDAAttributes

The ExtractCCDAAttributes Processor in Apache NiFi 1.2.0 through 1.19.1 does not restrict XML External Entity references. Flow configurations that include the ExtractCCDAAttributes Processor are vulnerable to malicious XML documents that contain Document Type Declarations with XML External Entity references. The resolution disables Document Type Declarations and disallows XML External Entity resolution in the ExtractCCDAAttributes Processor.

CVEs fixed in CFM 2.1.5

No new fixed CVEs since CFM 2.1.4.1000.



Note: CVE-2022-42889 - Apache Commons Text: Apache NiFi is not exposed to this vulnerability. However, in CFM 2.1.5, the dependencies on Apache Commons Text have all been upgraded to 1.10.0.

Related Information

[Support matrix](#)