

Appendix B

Production Log Tables

The AllTransactions Table

This table stores the metrics for all the transactions that took place (in aggregate) during each interval. It contains the same values as those shown in the All Transactions runtime panel and the All Transactions Summary Reports for Production monitors.

The table contains a record for each monitored interval. Each record has an interval number, which correlates with a parallel interval number in the other tables. You can use this interval number to relate all the different metrics occurring in the same time period.

The following table describes each column in the AllTransactions log table:

AllTransactions		
Column	Datatype	Description
DateTime	DATETIME	Date and time when the interval ended.
Active	INT	Number of transactions that were still in progress when the interval ended.
ComputerName	VARCHAR(255)	Machine that processed the transactions.
IntervalAborted	INT	Number of terminated transactions during the interval.
IntervalAbortedLevel	INT	0 If the IntervalAborted value was below the Warning level. 1 If it was between the Warning and Notification levels. 2 If it was over the Notification level.
IntervalAbortedRate *	INT	Number of transactions that ended unsuccessfully per second during the interval, multiplied by 1000. More precisely, it is the IntervalAborted value divided by the interval length in seconds, which is then multiplied by 1000.
IntervalBeginActive	INT	Number of transactions that were already in progress when the interval started.

AllTransactions		
Column	Datatype	Description
IntervalCompleted	INT	Number of transactions that finished successfully during the interval.
IntervalCompletedRate *	INT	Number of transactions that finished per second during the interval, multiplied by 1000. More precisely, it is the IntervalCompleted value divided by the interval length in seconds, which is then multiplied by 1000.
IntervalMaxActive	INT	Peak number of transactions that were active at any one time during the interval.
IntervalMinActive	INT	Smallest number of transactions that were active at any one time during the interval.
IntervalNumber	INT	Integer assigned to the interval, as counted sequentially from the start of the monitor. It may be used to correlate transaction information with other types of information.
IntervalStarted	INT	Number of transactions that began during the interval.
IntervalStartedLevel	INT	<p>0 If the IntervalStarted value during the interval is less than the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalStartedRate *	INT	Number of transactions that began per second during the interval, multiplied by 1000. More precisely, it is the IntervalStarted value divided by the interval length in seconds, which is then multiplied by 1000.
MaxActive	INT	Largest number of transactions that ran simultaneously since the monitor started.

* In the All Transactions runtime panel and reports, AppMetrics divides this rate-based value by 1000, which yields a rate-per-second value. For example, if the value is 1505, then AppMetrics divides it by 1000, which results in a value of 1.505 items per second. AppMetrics can then display this rate-per-second value in the runtime panel and reports.

Table B-1 AllTransactions Table

The Component Log Table

This table records the metrics generated for the different component types during each interval. It contains the same values as those shown in the Components runtime panel and the Components Summary Reports for Production monitors.

The table contains a record for each measured interval. Each record has an interval number, which correlates with a parallel interval number in the other tables. You can use this interval number to relate all the different metrics occurring in the same time period. Each interval also includes a package name, which identifies the package containing the component.

The following table describes each column in the Component log table:

Component		
Column	Datatype	Description
DateTime	DATETIME	Date and time when the interval ended.
Active	INT	Number of component instances that were still in progress when the interval ended.
ComputerName	VARCHAR(255)	Machine where the component was active.
IntervalAborted	INT	Number of component instances that terminated during the interval.
IntervalAbortedLevel	INT	<p>0 If the IntervalAborted value was below the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalAbortedRate *	INT	<p>Number of component instances that ended unsuccessfully per second during the interval, multiplied by 1000.</p> <p>More precisely, it is the IntervalAborted value divided by the interval length in seconds, which is then multiplied by 1000.</p>
IntervalAvgDuration	INT	For all the instances of the component that ended during this interval, this value is the average time span (in milliseconds) of those instances.
IntervalBeginActive	INT	Number of component instances that were already running when the interval began.

Component		
Column	Datatype	Description
IntervalCompleted	INT	Number of component instances that finished successfully during the interval.
IntervalCompletedRate *	INT	Number of component instances that finished per second during the interval, multiplied by 1000. More precisely, it is the IntervalCompleted value divided by the interval length in seconds, which is then multiplied by 1000.
IntervalDurationLevel	INT	<p>0 If the IntervalAvgDuration value was below the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalMaxActive	INT	Peak number of component instances that were running at any one time during the interval.
IntervalMaxDuration	INT	Of the component instances that completed during the interval, this is the longest time period (in milliseconds) for an instance to complete.
IntervalMinActive	INT	Minimum number of component instances that were running at any one time during the interval.
IntervalMinDuration	INT	Of the component instances that completed during the interval, this is the shortest time period (in milliseconds) for an instance to complete.
IntervalNumber	INT	Integer assigned to the interval, as counted sequentially from the start of the monitor. It may be used to correlate transaction information with other types of information.
IntervalStarted	INT	Number of component instances that began during the interval.

Component		
Column	Datatype	Description
IntervalStartedLevel	INT	<p>0 If the IntervalStarted value is less than the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalStartedRate *	INT	<p>Number of component instances that began per second during the interval, multiplied by 1000.</p> <p>More precisely, it is the IntervalStarted value divided by the interval length in seconds, which is then multiplied by 1000.</p>
MaxActive	INT	Largest number of component instances that ran simultaneously since the monitor started.
PackageName	VARCHAR(255)	Name of the package containing the component. This value combined with the SinkName uniquely identifies a package
SinkName	VARCHAR(255)	Name of the component.

* In the Components runtime panel and reports, AppMetrics divides this rate-based value by 1000, which yields a rate-per-second value. For example, if the value is 1505, then AppMetrics divides it by 1000, which results in a value of 1.505 items per second. AppMetrics can then display this rate-per-second value in the runtime panel and reports.

Table B-2 Component Log Table

The Package Log Table

This table contains metrics for the monitored MTS Server Packages or COM+ Applications. The Package log table contains the metrics generated for packages during each interval. The table contains the same values as those displayed in the Packages/Applications runtime panel and the Packages/Applications Summary Reports for Production monitors.

The table contains a record for each interval of monitoring. Each record has an interval number, which correlates with a parallel interval number in the other tables. You can use this interval number to relate all the different metrics occurring during the same time period.

The following table describes each column in the Package log table:

Package		
Column	Datatype	Description
DateTime	DATETIME	Date and time when the interval ended.
ComputerName	VARCHAR(255)	Machine where the package was active.
Crashes	INT	Number of times the package failed since the monitor started.
IntervalLost	INT	Number of lost messages for the package during the interval.
IntervalNumber	INT	Integer assigned to the interval, as counted sequentially from the start of the monitor. It may be used to correlate transaction information with other types of information.
Lost	INT	Total number of lost messages for the package since the monitor started.
MTSThreads	INT	Number of MTS/COM+ threads for the package during the interval.
NumActivations	INT	Number of times the package has been run since the monitor started.
PackageName	VARCHAR(255)	Title of the application.
PageFaultsPerSec	FLOAT	Page fault rate for the package during the interval.
PercentCPU	INT	Portion of CPU time used by the package during the interval.
Shutdowns	INT	Number of times the package was stopped since the monitor started.

Package		
Column	Datatype	Description
State	INT	Status of the package during the interval: 1 = active, 0 = inactive
WorkingSet	INT	Size of real memory that the package used during the interval.

Table B-3 Package Log Table

The Transactions Log Table

This table records the metrics generated for transactions during each interval. It contains the same values as those displayed in the Transactions runtime panel and the Transactions Summary Reports for Production monitors.

The table contains a record for each interval of monitoring. Each record has an interval number, which correlates with a parallel number in the other tables. You can use this interval number to relate all the different metrics occurring in the same time period.

The following table describes each column in the Transactions log table:

Transactions		
Column	Datatype	Description
DateTime	DATETIME	Date and time when the interval ended.
Active	INT	Number of transaction instances that were still in progress when the interval ended.
AvgDTCDuration	INT	Average length of time that the transaction instances in the interval were managed by the Distributed Transaction Coordinator.
ComputerName	VARCHAR(255)	Machine that processed the transaction.
IntervalAborted	INT	Number of transaction instances that were terminated during the interval.
IntervalAbortedLevel	INT	<p>0 If the IntervalAborted value was below the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalAbortedRate *	INT	<p>Number of transaction instances that failed per second during the interval, multiplied by 1000.</p> <p>More precisely, it is the IntervalAborted value divided by the interval length in seconds, which is then multiplied by 1000.</p>
IntervalAvgDuration	INT	For all the transaction instances that ended during the interval, this is the average time span (in milliseconds) of those instances.

Transactions		
Column	Datatype	Description
IntervalBeginActive	INT	Number of transaction instances that were already in progress when the interval started.
IntervalCompleted	INT	Number of transaction instances that finished successfully during the interval.
IntervalCompletedRate *	INT	Number of transaction instances that finished per second during the interval, multiplied by 1000. More precisely, it is the IntervalCompleted value divided by the interval length in seconds, which is then multiplied by 1000.
IntervalDurationLevel	INT	<p>0 If the IntervalAvgDuration value was below the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>
IntervalMaxActive	INT	Peak number of transaction instances that were running at any one time during the interval.
IntervalMaxDuration	INT	Of the transaction instances that completed during the interval, this is the longest time period (in milliseconds) for an instance to complete.
IntervalMinActive	INT	Minimum number of transaction instances that were running at any one time during the interval.
IntervalMinDuration	INT	Of the transaction instances that completed during the interval, this is the shortest time period (in milliseconds) for an instance to complete.
IntervalNumber	INT	Integer assigned to the interval, as counted sequentially from the start of the monitor. It may be used to correlate transaction information with other types of information.
IntervalStarted	INT	Number of transaction instances that began during the interval.
IntervalStartedLevel	INT	<p>0 If the IntervalStarted value is less than the Warning level.</p> <p>1 If it was between the Warning and Notification levels.</p> <p>2 If it was over the Notification level.</p>

Transactions		
Column	Datatype	Description
IntervalStartedRate *	INT	Number of transaction instances that began per second during the interval, multiplied by 1000. More precisely, it is the IntervalStarted value divided by the interval length in seconds, which is then multiplied by 1000.
MaxActive	INT	Largest number of transaction instances that ran simultaneously since the monitor started.
MaxDTCDuration	INT	Time in milliseconds that a specific instance was managed by the DTC. The instance in question had the following traits: <ul style="list-style-type: none"> • It ended during the interval • It spent more of its duration being managed by the DTC than any other instance during the interval
MinDTCDuration	INT	Time in milliseconds that a specific instance was managed by the DTC. The instance in question had the following traits: <ul style="list-style-type: none"> • It ended during the interval • It spent the smallest amount of its duration being managed by the DTC than any other instance during the interval
SinkName	VARCHAR(255)	Name of the transaction.

* In the Transactions runtime panel and reports, AppMetrics divides this rate-based value by 1000, which yields a rate-per-second value. For example, if the value is 1505, then AppMetrics divides it by 1000, which results in a value of 1.505 items per second. AppMetrics can then display this rate-per-second value in the runtime panel and reports.

Table B4: Transactions Log Table

SQL Table Definitions for Production Monitor Logs

The following table definitions show the SQL syntax that is used to create a relational database containing the data gathered by the Production monitors.

```
CREATE TABLE [dbo].[AllTransactions] (  
    [DateTime] [datetime] NULL ,  
    [Active] [int] NULL ,  
    [ComputerName] [varchar] (255) NULL ,  
    [IntervalAborted] [int] NULL ,  
    [IntervalAbortedLevel] [int] NULL ,  
    [IntervalAbortedRate] [int] NULL ,  
    [IntervalBeginActive] [int] NULL ,  
    [IntervalCompleted] [int] NULL ,  
    [IntervalCompletedRate] [int] NULL ,  
    [IntervalMaxActive] [int] NULL ,  
    [IntervalMinActive] [int] NULL ,  
    [IntervalNumber] [int] NULL ,  
    [IntervalStarted] [int] NULL ,  
    [IntervalStartedLevel] [int] NULL ,  
    [IntervalStartedRate] [int] NULL ,  
    [MaxActive] [int] NULL  
) ON [PRIMARY]  
GO
```

```
CREATE TABLE [dbo].[Component] (  
    [DateTime] [datetime] NULL ,  
    [Active] [int] NULL ,  
    [ComputerName] [varchar] (255) NULL ,  
    [IntervalAborted] [int] NULL ,  
    [IntervalAbortedLevel] [int] NULL ,  
    [IntervalAbortedRate] [int] NULL ,  
    [IntervalAvgDuration] [int] NULL ,  
    [IntervalBeginActive] [int] NULL ,  
    [IntervalCompleted] [int] NULL ,  
    [IntervalCompletedRate] [int] NULL ,  
    [IntervalDurationLevel] [int] NULL ,  
    [IntervalMaxActive] [int] NULL ,  
    [IntervalMaxDuration] [int] NULL ,  
    [IntervalMinActive] [int] NULL ,  
    [IntervalMinDuration] [int] NULL ,  
    [IntervalNumber] [int] NULL ,  
    [IntervalStarted] [int] NULL ,  
    [IntervalStartedLevel] [int] NULL ,  
    [IntervalStartedRate] [int] NULL ,  
    [MaxActive] [int] NULL ,  
    [PackageName] [varchar] (255) NULL ,  
    [SinkName] [varchar] (255) NULL  
) ON [PRIMARY]  
GO
```

```
CREATE TABLE [dbo].[Package] (  
    [DateTime] [datetime] NULL ,  
    [ComputerName] [varchar] (255) NULL ,  
    [Crashes] [int] NULL ,  
    [IntervalLost] [int] NULL ,
```

```

        [IntervalNumber] [int] NULL ,
        [Lost] [int] NULL ,
        [MTSThreads] [int] NULL ,
        [NumActivations] [int] NULL ,
        [PackageName] [varchar] (255) NULL ,
        [PageFaultsPerSec] [float] NULL ,
        [PercentCPU] [int] NULL ,
        [Shutdowns] [int] NULL ,
        [State] [int] NULL ,
        [WorkingSet] [int] NULL,
        [VirtualBytes][int] NULL
    ) ON [PRIMARY]
GO

CREATE TABLE [dbo].[Transactions] (
    [DateTime] [datetime] NULL ,
    [Active] [int] NULL ,
    [AvgDTCDuration] [int] NULL ,
    [ComputerName] [varchar] (255) NULL ,
    [IntervalAborted] [int] NULL ,
    [IntervalAbortedLevel] [int] NULL ,
    [IntervalAbortedRate] [int] NULL ,
    [IntervalAvgDuration] [int] NULL ,
    [IntervalBeginActive] [int] NULL ,
    [IntervalCompleted] [int] NULL ,
    [IntervalCompletedRate] [int] NULL ,
    [IntervalDurationLevel] [int] NULL ,
    [IntervalMaxActive] [int] NULL ,
    [IntervalMaxDuration] [int] NULL ,
    [IntervalMinActive] [int] NULL ,
    [IntervalMinDuration] [int] NULL ,
    [IntervalNumber] [int] NULL ,
    [IntervalStarted] [int] NULL ,
    [IntervalStartedLevel] [int] NULL ,
    [IntervalStartedRate] [int] NULL ,
    [MaxActive] [int] NULL ,
    [MaxDTCDuration] [int] NULL ,
    [MinDTCDuration] [int] NULL ,
    [SinkName] [varchar] (255) NULL
) ON [PRIMARY]
GO

```

Figure 3-1 SQL Table Definitions for Production Monitors