

Table1

USE sample;

```
create table SystemWatchIntegration_Old(
id_auto int IDENTITY(1,1),
AggreType varchar(18) NOT NULL,
Id bigint NOT NULL,
Site_Id varchar(18) NOT NULL,
Lead_City varchar(50) NOT NULL,
Lead_City_CustAffected bigint NULL,
ResultDesc varchar(50) NULL,
Nbr_OMS_Incidents bigint NULL,
Cust_Affected bigint NULL,
OutageCount varchar(18) NULL,
Event_Start_Dttm datetime NULL,
Estimated_Restore_Dttm datetime NULL,
OutageFirstReported varchar(4000) NULL,
ETRReported datetime NULL,
CorpComm_Msg varchar(400) NULL,
Notification_Flag varchar(1) NULL,
Last_Sent_Mail datetime NULL,
Primary Key(AggreType,Id,Site_Id,Lead_City)
);
```

Table 2

USE sample;

```
create table SystemWatchIntegration_New(
id_auto int IDENTITY(1,1),
AggreType varchar(18) NOT NULL,
Id bigint NOT NULL,
Site_Id varchar(18) NOT NULL,
Lead_City varchar(50) NOT NULL,
Lead_City_CustAffected bigint NULL,
ResultDesc varchar(50) NULL,
Nbr_OMS_Incidents bigint NULL,
Cust_Affected bigint NULL,
OutageCount varchar(18) NULL,
Event_Start_Dttm datetime NULL,
Estimated_Restore_Dttm datetime NULL,
OutageFirstReported varchar(4000) NULL,
```

ETRReported datetime NULL,
CorpComm_Msg varchar(400) NULL,
Notification_Flag varchar(1) NULL,
Last_Sent_Mail datetime NULL,
Primary Key(AggreType,Id,Site_Id,Lead_City)
);

INSERTING DATA INTO SystemWatchIntegration_Old

INSERT INTO SystemWatchIntegration_Old (AggreType, Id, Site_Id, Lead_City,
Lead_City_CustAffected, ResultDesc, Nbr_OMS_Incidents, Cust_Affected, OutageCount,
Event_Start_Dttm, Estimated_Restore_Dttm, OutageFirstReported, ETRReported,
CorpComm_Msg, Notification_Flag, Last_Sent_Mail)
VALUES
('Type1', 1001, 'Site001', 'City A', 100, 'Success', 2, 50, '10', '2024-06-27 10:00:00', '2024-06-27
12:00:00', 'Initial report of outage', '2024-06-27 11:30:00', 'Power failure reported at Site001.',
'N', '2024-06-27 13:00:00'),

('Type1', 1002, 'Site002', 'City B', 50, 'Partial', 1, 20, '5', '2024-06-27 09:00:00', '2024-06-27
11:30:00', 'Outage reported at Site002 due to equipment failure.', '2024-06-27 10:30:00',
'Technical issue identified as cause of power outage.', 'N', '2024-06-27 12:00:00'),

('Type2', 1003, 'Site003', 'City C', 200, 'Failure', 3, 150, '15', '2024-06-27 08:00:00', '2024-06-27
10:30:00', 'Major power failure affecting Site003.', '2024-06-27 09:45:00', 'Severe weather
conditions causing outage.', 'N', '2024-06-27 11:00:00'),

('Type2', 1004, 'Site004', 'City D', 80, 'Partial', 2, 30, '8', '2024-06-27 07:30:00', '2024-06-27
10:00:00', 'Localized power outage at Site004.', '2024-06-27 09:00:00', 'Technical team
investigating cause of outage.', 'N', '2024-06-27 10:30:00'),

('Type1', 1005, 'Site005', 'City E', 120, 'Success', 1, 100, '12', '2024-06-27 06:00:00', '2024-06-27
08:30:00', 'Power outage resolved at Site005.', '2024-06-27 08:00:00', 'Final report sent to
affected customers.', 'N', '2024-06-27 09:00:00');

| Messages | | | | | | | | | | | | | |
|----------|---------|-----------|------|---------|-----------|------------------------|------------|-------------------|---------------|-------------|-------------------------|-------------------------|---|
| | id_auto | AggreType | Id | Site_Id | Lead_City | Lead_City_CustAffected | ResultDesc | Nbr_OMS_Incidents | Cust_Affected | OutageCount | Event_Start_Dttm | Estimated_Restore_Dttm | OutageFirstReported |
| 1 | 1 | Type1 | 1001 | Site001 | City A | 100 | Success | 2 | 50 | 10 | 2024-06-27 10:00:00.000 | 2024-06-27 12:00:00.000 | Initial report of outage |
| 2 | 2 | Type1 | 1002 | Site002 | City B | 50 | Partial | 1 | 20 | 5 | 2024-06-27 09:00:00.000 | 2024-06-27 11:30:00.000 | Outage reported at Site002 due to equip |
| 3 | 3 | Type2 | 1003 | Site003 | City C | 200 | Failure | 3 | 150 | 15 | 2024-06-27 08:00:00.000 | 2024-06-27 10:30:00.000 | Major power failure affecting Site003. |
| 4 | 4 | Type2 | 1004 | Site004 | City D | 80 | Partial | 2 | 30 | 8 | 2024-06-27 07:30:00.000 | 2024-06-27 10:00:00.000 | Localized power outage at Site004. |
| 5 | 5 | Type1 | 1005 | Site005 | City E | 120 | Success | 1 | 100 | 12 | 2024-06-27 06:00:00.000 | 2024-06-27 08:30:00.000 | Power outage resolved at Site005. |

| OutageFirstReported | ETRReported | CorpComm_Msg | Notification_Flag | Last_Sent_Mail |
|---|-------------------------|---|-------------------|-------------------------|
| Initial report of outage | 2024-06-27 11:30:00.000 | Power failure reported at Site001. | N | 2024-06-27 13:00:00.000 |
| Outage reported at Site002 due to equipment fail... | 2024-06-27 10:30:00.000 | Technical issue identified as cause of power out... | N | 2024-06-27 12:00:00.000 |
| Major power failure affecting Site003. | 2024-06-27 09:45:00.000 | Severe weather conditions causing outage. | N | 2024-06-27 11:00:00.000 |
| Localized power outage at Site004. | 2024-06-27 09:00:00.000 | Technical team investigating cause of outage. | N | 2024-06-27 10:30:00.000 |
| Power outage resolved at Site005. | 2024-06-27 08:00:00.000 | Final report sent to affected customers. | N | 2024-06-27 09:00:00.000 |

INSERTING DATA SystemWatchIntegration_New

```
INSERT INTO SystemWatchIntegration_New(AggreType, Id, Site_Id, Lead_City,
Lead_City_CustAffected, ResultDesc, Nbr_OMS_Incidents, Cust_Affected, OutageCount,
Event_Start_Dttm, Estimated_Restore_Dttm, OutageFirstReported, ETRReported,
CorpComm_Msg, Notification_Flag, Last_Sent_Mail)
VALUES
```

```
('OutragesByIncident', 1, 'Site001', 'City A', 100, 'Success', 2, 250, '10', '2024-06-27 10:00:00',
'2024-06-27 12:00:00', 'Initial report of outage.', '2024-06-27 11:30:00', 'Message regarding
outage at City A.', 'N', '2024-06-27 13:00:00'),
```

```
('OutragesByAccident', 2, 'Site002', 'City B', 50, 'Partial', 1, 320, '5', '2024-06-27 09:00:00',
'2024-06-27 11:30:00', 'Power issue reported in City B.', '2024-06-27 10:30:00', 'Technician
dispatched for resolution.', 'N', '2024-06-27 12:00:00'),
```

```
('Type1', 1001, 'Site001', 'City A', 100, 'Failure', 3, 75, '15', '2024-06-27 08:00:00', '2024-06-27
10:30:00', 'Major power failure affecting Site003.', '2024-06-27 09:45:00', 'Severe weather
conditions causing outage.', 'N', '2024-06-27 11:00:00'),
```

```
('Type2', 1004, 'Site004', 'City D', 90, 'Partial', 2, 430, '8', '2024-06-27 07:30:00', '2024-06-27
10:00:00', 'Localized power outage at Site004.', '2024-06-27 09:00:00', 'Technical team
investigating cause of outage.', 'N', '2024-06-27 10:30:00'),
```

```
('OutragesByIncident', 3, 'Site003', 'City C', 200, 'Failure', 3, 850, '15', '2024-06-27 08:00:00',
'2024-06-27 10:30:00', 'Major outage in City C.', '2024-06-27 09:45:00', 'Critical outage response
in progress.', 'N', '2024-06-27 11:00:00');
```

| | id_auto | AggreType | Id | Site_Id | Lead_City | Lead_City_CustAffected | ResultDesc | Nbr_OMS_Incidents | Cust_Affected | OutageCount | Event_Start_Dttm |
|---|---------|--------------------|------|---------|-----------|------------------------|------------|-------------------|---------------|-------------|-------------------------|
| 1 | 2 | OutragesByAccident | 2 | Site002 | City B | 50 | Partial | 1 | 320 | 5 | 2024-06-27 09:00:00.000 |
| 2 | 1 | OutragesByIncident | 1 | Site001 | City A | 100 | Success | 2 | 250 | 10 | 2024-06-27 10:00:00.000 |
| 3 | 5 | OutragesByIncident | 3 | Site003 | City C | 200 | Failure | 3 | 850 | 15 | 2024-06-27 08:00:00.000 |
| 4 | 3 | Type1 | 1001 | Site001 | City A | 100 | Failure | 3 | 75 | 15 | 2024-06-27 08:00:00.000 |
| 5 | 4 | Type2 | 1004 | Site004 | City D | 90 | Partial | 2 | 430 | 8 | 2024-06-27 07:30:00.000 |

| Estimated_Restore_Dttm | OutageFirstReported | ETRReported | CorpComm_Msg | Notification_Flag | Last_Sent_Mail |
|-------------------------|--|-------------------------|---|-------------------|-------------------------|
| 2024-06-27 11:30:00.000 | Power issue reported in City B. | 2024-06-27 10:30:00.000 | Technician dispatched for resolution. | N | 2024-06-27 12:00:00.000 |
| 2024-06-27 12:00:00.000 | Initial report of outage. | 2024-06-27 11:30:00.000 | Message regarding outage at City A. | N | 2024-06-27 13:00:00.000 |
| 2024-06-27 10:30:00.000 | Major outage in City C. | 2024-06-27 09:45:00.000 | Critical outage response in progress. | N | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:30:00.000 | Major power failure affecting Site003. | 2024-06-27 09:45:00.000 | Severe weather conditions causing outage. | N | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:00:00.000 | Localized power outage at Site004. | 2024-06-27 09:00:00.000 | Technical team investigating cause of outage. | N | 2024-06-27 10:30:00.000 |

FOR NEW OUTRAGES

```

UPDATE n
SET Notification_Flag = 'Y'
FROM SystemWatchIntegration_New n
LEFT JOIN SystemWatchIntegration_Old o
  ON n.AggreType = o.AggreType
  AND n.Id = o.Id
  AND n.Site_Id = o.Site_Id
  AND n.Lead_City = o.Lead_City
WHERE o.AggreType IS NULL
  AND o.Id IS NULL
  AND o.Site_Id IS NULL
  AND o.Lead_City IS NULL
  AND n.Cust_Affected > 249
  AND n.AggreType = 'OutragesByIncident'
  AND n.CorpComm_Msg IS NOT NULL;

```

The NEW TABLE AFTER EXECUTING THE ABOVE QUERY

| | id_auto | AggreType | Id | Site_Id | Lead_City | Lead_City_CustAffected | ResultDesc | Nbr_OMS_Incidents | Cust_Affected | OutageCount | Event_Start_Dttm |
|---|---------|--------------------|------|---------|-----------|------------------------|------------|-------------------|---------------|-------------|-------------------------|
| 1 | 2 | OutragesByAccident | 2 | Site002 | City B | 50 | Partial | 1 | 320 | 5 | 2024-06-27 09:00:00.000 |
| 2 | 1 | OutragesByIncident | 1 | Site001 | City A | 100 | Success | 2 | 250 | 10 | 2024-06-27 10:00:00.000 |
| 3 | 5 | OutragesByIncident | 3 | Site003 | City C | 200 | Failure | 3 | 850 | 15 | 2024-06-27 08:00:00.000 |
| 4 | 3 | Type1 | 1001 | Site001 | City A | 100 | Failure | 3 | 75 | 15 | 2024-06-27 08:00:00.000 |
| 5 | 4 | Type2 | 1004 | Site004 | City D | 90 | Partial | 2 | 430 | 8 | 2024-06-27 07:30:00.000 |

| Estimated_Restore_Dttm | OutageFirstReported | ETRReported | CorpComm_Msg | Notification_Flag | Last_Sent_Mail |
|-------------------------|--|-------------------------|---|-------------------|-------------------------|
| 2024-06-27 11:30:00.000 | Power issue reported in City B. | 2024-06-27 10:30:00.000 | Technician dispatched for resolution. | N | 2024-06-27 12:00:00.000 |
| 2024-06-27 12:00:00.000 | Initial report of outage. | 2024-06-27 11:30:00.000 | Message regarding outage at City A. | Y | 2024-06-27 13:00:00.000 |
| 2024-06-27 10:30:00.000 | Major outage in City C. | 2024-06-27 09:45:00.000 | Critical outage response in progress. | Y | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:30:00.000 | Major power failure affecting Site003. | 2024-06-27 09:45:00.000 | Severe weather conditions causing outage. | N | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:00:00.000 | Localized power outage at Site004. | 2024-06-27 09:00:00.000 | Technical team investigating cause of outage. | N | 2024-06-27 10:30:00.000 |

FOR OLD OUTRAGES

```
UPDATE n
SET Notification_Flag = 'Y'
FROM SystemWatchIntegration_New n
LEFT JOIN SystemWatchIntegration_Old o
  ON n.AggreType = o.AggreType
  AND n.Id = o.Id
  AND n.Site_Id = o.Site_Id
  AND n.Lead_City = o.Lead_City
WHERE o.AggreType IS NOT NULL
  AND o.Id IS NOT NULL
  AND o.Site_Id IS NOT NULL
  AND o.Lead_City IS NOT NULL
  AND
    (n.Cust_Affected=1.5*o.Cust_Affected
  OR n.ETRReported!=o.ETRReported
  OR DATEDIFF(HOUR,n.Last_Sent_Mail,GETDATE())>1);
```

The NEW TABLE AFTER EXECUTING THE ABOVE QUERY

| Results Messages | | | | | | | | | | | |
|------------------|---------|--------------------|------|---------|-----------|------------------------|------------|-------------------|---------------|-------------|-------------------------|
| | id_auto | AggreType | Id | Site_Id | Lead_City | Lead_City_CustAffected | ResultDesc | Nbr_OMS_Incidents | Cust_Affected | OutageCount | Event_Start_Dttm |
| 1 | 2 | OutragesByAccident | 2 | Site002 | City B | 50 | Partial | 1 | 320 | 5 | 2024-06-27 09:00:00.000 |
| 2 | 1 | OutragesByIncident | 1 | Site001 | City A | 100 | Success | 2 | 250 | 10 | 2024-06-27 10:00:00.000 |
| 3 | 5 | OutragesByIncident | 3 | Site003 | City C | 200 | Failure | 3 | 850 | 15 | 2024-06-27 08:00:00.000 |
| 4 | 3 | Type1 | 1001 | Site001 | City A | 100 | Failure | 3 | 75 | 15 | 2024-06-27 08:00:00.000 |
| 5 | 4 | Type2 | 1004 | Site004 | City D | 90 | Partial | 2 | 430 | 8 | 2024-06-27 07:30:00.000 |

| Estimated_Restore_Dttm | OutageFirstReported | ETRReported | CorpComm_Msg | Notification_Flag | Last_Sent_Mail |
|-------------------------|--|-------------------------|---|-------------------|-------------------------|
| 2024-06-27 11:30:00.000 | Power issue reported in City B. | 2024-06-27 10:30:00.000 | Technician dispatched for resolution. | N | 2024-06-27 12:00:00.000 |
| 2024-06-27 12:00:00.000 | Initial report of outage. | 2024-06-27 11:30:00.000 | Message regarding outage at City A. | Y | 2024-06-27 13:00:00.000 |
| 2024-06-27 10:30:00.000 | Major outage in City C. | 2024-06-27 09:45:00.000 | Critical outage response in progress. | Y | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:30:00.000 | Major power failure affecting Site003. | 2024-06-27 09:45:00.000 | Severe weather conditions causing outage. | Y | 2024-06-27 11:00:00.000 |
| 2024-06-27 10:00:00.000 | Localized power outage at Site004. | 2024-06-27 09:00:00.000 | Technical team investigating cause of outage. | Y | 2024-06-27 10:30:00.000 |