

```
1  using System;
2  using System.Collections.Generic;
3
4  namespace Microsoft.Win32.TaskScheduler
5  {
6      internal interface IActionModel
7      {
8          TaskActionType ActionType { get; }
9          string Id { get; set; }
10     }
11
12    internal interface IActionCollectionModel : IList<IActionModel>, System.Collections.IList
13    {
14        bool AllowConversion { get; set; }
15        string Context { get; set; }
16        IActionModel Add(TaskActionType actionType);
17        void ConvertUnsupportedActions();
18    }
19
20    internal interface IBootTriggerModel : ITriggerModel { }
21
22    internal interface IComHandlerActionModel : IActionModel
23    {
24        Guid ClassId { get; set; }
25        string Data { get; set; }
26    }
27
28    internal interface ICustomTriggerModel : ITriggerModel
29    {
30        string Name { get; }
31        IDictionary<string, string> Properties { get; }
32    }
33
34    internal interface IDailyTriggerModel : ITriggerModel
35    {
36        short DaysInterval { get; set; }
37    }
38
39    internal interface IE-mailActionModel : IActionModel
40    {
41        string Server { get; set; }
42        string Subject { get; set; }
43        string To { get; set; }
44        string Cc { get; set; }
45        string Bcc { get; set; }
46        string ReplyTo { get; set; }
47        string From { get; set; }
48        System.Net.Mail.MailPriority Priority { get; set; }
49        IDictionary<string, string> HeaderFields { get; }
50        string Body { get; set; }
51        string[] Attachments { get; set; }
```

```
52     }
53
54     internal interface IEventTriggerModel : ITriggerModel
55     {
56         string Subscription { get; set; }
57         IDictionary<string, string> ValueQueries { get; }
58     }
59
60     internal interface IExecActionModel : IActionModel
61     {
62         string Arguments { get; set; }
63         string Path { get; set; }
64         string WorkingDirectory { get; set; }
65     }
66
67     internal interface IIIdleSettingsModel
68     {
69         TimeSpan? IdleDuration { get; set; }
70         bool RestartOnIdle { get; set; }
71         bool StopOnIdleEnd { get; set; }
72         TimeSpan? WaitTimeout { get; set; }
73     }
74
75     internal interface IIIdleTriggerModel : ITriggerModel { }
76
77     internal interface ILogonTriggerModel : ITriggerModel
78     {
79         string UserId { get; set; }
80     }
81
82     internal interface IMaintenanceSettingsModel
83     {
84         TimeSpan? Deadline { get; set; }
85         bool Exclusive { get; set; }
86         TimeSpan? Period { get; set; }
87     }
88
89     internal interface IMonthlyDOWTriggerModel : ITriggerModel
90     {
91         DaysOfTheWeek DaysOfWeek { get; set; }
92         MonthsOfTheYear MonthsOfYear { get; set; }
93         bool RunOnLastWeekOfMonth { get; set; }
94         WhichWeek WeeksOfMonth { get; set; }
95     }
96
97     internal interface IMonthlyTriggerModel : ITriggerModel
98     {
99         byte[] DaysOfMonth { get; set; }
100        MonthsOfTheYear MonthsOfYear { get; set; }
101        bool RunOnLastDayOfMonth { get; set; }
102    }
103
```

```
104     internal interface INetworkSettingsModel
105     {
106         Guid Id { get; set; }
107         string Name { get; set; }
108     }
109
110    internal interface IPrincipalModel
111    {
112        string DisplayName { get; set; }
113        string GroupId { get; set; }
114        string Id { get; set; }
115        string UserId { get; set; }
116    }
117
118    internal interface IRegisteredTaskModel
119    {
120        ITaskDefinitionModel Definition { get; }
121        bool Enabled { get; set; }
122        ITaskFolderModel Folder { get; }
123        DateTime? LastRunTime { get; }
124        int? LastTaskResult { get; }
125        string Name { get; }
126        DateTime? NextRunTime { get; }
127        int? NumberOfMissedRuns { get; }
128        string Path { get; }
129        TaskState State { get; }
130        string Xml { get; }
131        IReadOnlyList<IRunningTaskModel> GetInstances();
132        IReadOnlyList<DateTime> GetRunTimes(DateTime start, DateTime end, uint      ↪
133                                         count);
134        string GetSecurityDescriptor(System.Security.AccessControl.SecurityInfos      ↪
135                                     includeSections);
136        IRunningTaskModel Run(params string[] parameters);
137        IRunningTaskModel RunEx(string[] parameters, TaskRunFlags flags, int      ↪
138                               sessionId, string user);
139        void SetSecurityDescriptor(string sddl, TaskSetSecurityOptions options);
140        void Stop();
141    }
142
143    internal interface IRegistrationTriggerModel : ITriggerModel { }
144
145    internal interface IRunningTaskModel
146    {
147        string CurrentAction { get; }
148        uint? EnginePID { get; }
149        Guid? InstanceGuid { get; }
150        string Name { get; }
151        string Path { get; }
152        TaskState State { get; }
153        void Refresh();
154        void Stop();
155    }
```

```
153
154     internal interface ISessionStateChangeTriggerModel : ITriggerModel
155     {
156         TaskSessionStateChangeType StateChange { get; set; }
157         string UserId { get; set; }
158     }
159
160     internal interface IShowMessageActionModel : IActionModel
161     {
162         string MessageBody { get; set; }
163         string Title { get; set; }
164     }
165
166     internal interface ITaskDefinitionModel
167     {
168         IActionCollectionModel Actions { get; }
169         string Author { get; set; }
170         string Data { get; set; }
171         DateTime? Date { get; set; }
172         string Description { get; set; }
173         string Documentation { get; set; }
174         TaskLogonType LogonType { get; set; }
175         IPrincipalModel Principal { get; }
176         TaskRunLevel RunLevel { get; set; }
177         string SecurityDescriptor { get; set; }
178         ITaskSettingsModel Settings { get; }
179         string Source { get; set; }
180         ITriggerCollectionModel Triggers { get; }
181         string URI { get; set; }
182         Version Version { get; set; }
183         string XmlText { get; set; }
184     }
185
186     internal interface ITaskFolderModel
187     {
188         string Name { get; }
189         string Path { get; }
190         ITaskFolderModel CreateFolder(string subFolderName, string sddl);
191         void DeleteFolder(string subFolderName);
192         void DeleteTask(string Name);
193         ITaskFolderModel GetFolder(string path);
194         ICollection<ITaskFolderModel> GetFolders();
195         string GetSecurityDescriptor(System.Security.AccessControl.SecurityInfos ??
196             includeSections);
196         IRegisteredTaskModel GetTask(string path);
197         IReadOnlyList<IRegisteredTaskModel> GetTasks(bool includeHidden = false);
198         IRegisteredTaskModel RegisterTask(string path, string xmlText,
199             TaskCreation flags, string userId, string password, TaskLogonType ???
200             logonType, string sddl);
201         IRegisteredTaskModel RegisterTaskDefinition(string path,
202             ITaskDefinitionModel pDefinition, TaskCreation flags, string userId, ???
203             string password, TaskLogonType logonType, string sddl);
```

```
200     void SetSecurityDescriptor(string sddl, TaskSetSecurityOptions options);  
201 }  
202  
203 internal interface ITaskServiceModel  
204 {  
205     bool Connected { get; }  
206     string ConnectedDomain { get; }  
207     string ConnectedUser { get; }  
208     Version HighestVersion { get; }  
209     ITaskFolderModel RootFolder { get; }  
210     string TargetServer { get; }  
211     void Connect(string serverName, string user, string domain, string  
212         password);  
212     ITaskFolderModel GetFolder(string path);  
213     IReadOnlyList<IRunningTaskModel> GetRunningTasks(bool includeHidden =  
214         false);  
214     IRegisteredTaskModel GetTask(string fullPath);  
215     ITaskDefinitionModel NewTask();  
216 }  
217  
218 internal interface ITaskSettingsModel  
219 {  
220     bool AllowDemandStart { get; set; }  
221     bool AllowHardTerminate { get; set; }  
222     TaskCompatibility Compatibility { get; set; }  
223     TimeSpan? DeleteExpiredTaskAfter { get; set; }  
224     bool DisallowStartIfOnBatteries { get; set; }  
225     bool DisallowStartOnRemoteAppSession { get; set; }  
226     bool Enabled { get; set; }  
227     TimeSpan? ExecutionTimeLimit { get; set; }  
228     bool Hidden { get; set; }  
229     IIIdleSettingsModel IdleSettings { get; }  
230     IMaintenanceSettingsModel MaintenanceSettings { get; }  
231     TaskInstancesPolicy MultipleInstances { get; set; }  
232     INetworkSettingsModel NetworkSettings { get; }  
233     System.Diagnostics.ProcessPriorityClass Priority { get; set; }  
234     int? RestartCount { get; set; }  
235     TimeSpan? RestartInterval { get; set; }  
236     bool RunOnlyIfIdle { get; set; }  
237     bool RunOnlyIfNetworkAvailable { get; set; }  
238     bool StartWhenAvailable { get; set; }  
239     bool StopIfGoingOnBatteries { get; set; }  
240     bool UseUnifiedSchedulingEngine { get; set; }  
241     bool Volatile { get; set; }  
242     bool WakeToRun { get; set; }  
243 }  
244  
245 internal interface ITimeTriggerModel : ITriggerModel { }  
246  
247 internal interface ITriggerCollectionModel : IList<ITriggerModel>,  
248     System.Collections.IList  
248 {
```

```
249     ITriggerModel AddNew(TaskTriggerType actionType);  
250 }  
251  
252 internal interface ITriggerModel  
253 {  
254     TimeSpan? Delay { get; set; }  
255     bool Enabled { get; set; }  
256     DateTime? EndBoundary { get; set; }  
257     TimeSpan? ExecutionTimeLimit { get; set; }  
258     string Id { get; set; }  
259     TimeSpan? RepetitionDuration { get; set; }  
260     TimeSpan? RepetitionInterval { get; set; }  
261     bool RepetitionStopAtDurationEnd { get; set; }  
262     DateTime StartBoundary { get; set; }  
263     TaskTriggerType TriggerType { get; }  
264 }  
265  
266 internal interface IWeeklyTriggerModel : ITriggerModel  
267 {  
268     DaysOfTheWeek DaysOfWeek { get; set; }  
269     short WeeksInterval { get; set; }  
270 }  
271 }
```