ATMOS Product Manual





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Introduction

Thank you for using ATMOS, a comprehensive weather reporting solution for broadcast radio and television stations; air traffic control facilities; and mass-transit systems. We hope that you enjoy using the product and find it easy to operate. This manual is updated often to reflect the feature set present in the most recent version of the software. For information on upgrading, please see the section titled '<u>Upgrading to the Latest Version</u>'.

Background of Summit Technology Group

Summit Technology Group is a Keego Harbor, Michigan based broadcast software manufacturer and broadcast engineering firm that operates throughout the globe. Some of our other products include <u>SideCAR Media Logger</u>, <u>TundraCast Audio Streaming</u>, and <u>TowerLytics Tower Light and</u> <u>Site Monitoring</u>. Our services span studio and transmitter site design/build, tower climbing, RF and transmitter maintenance, regulatory filings, and automation consulting. For more information about our <u>other products</u> or our <u>broadcast engineering services</u>, please visit us online at <u>www.summittechgroup.com</u> or call our sales team at (248) 706-6963 Option 1. The hyperlinks in this section are a convenient way to navigate directly to the associated pages on our website.

Theory of Operation

ATMOS serves the need for completely automated routine and emergency weather reports. To achieve this, many of ATMOS' functions are automated and are capable of running without human intervention. The workflow depends on a user to initially setup and configure the program to work in an automated manner. The most common configuration settings are described in this manual.

For information on how to ingest ATMOS audio files with a specific brand of automation software, please refer to '<u>Appendix A</u>'.

General Settings

The 'General Settings' menu contains all the global and general settings for the instance of ATMOS.

Save - Saves the current settings globally for the entire program (not just the settings controlled with the 'General Settings' menu.



Reset - The 'Reset' button completely resets the ATMOS settings file back to default values. This includes settings present in all menus and managers (except those dependent upon databases). Only use this button if your settings file has become corrupted or at the direction of Summit Technology Group support technicians.

File Settings

File Path - The file path for the final report audio. This path may be manually inserted or the user can browser for the file path with the adjacent 'Browse...' button.

File Settings	
File Path: C:\ATMOS	Browse
File Name: @MM@DD@YY@HH@mm_[temp]_[wx]_[advertID].wav	

File Name - The filename for the final report audio. The filename can be static or dynamic. For example, with certain automation systems, you may need to keep the name of the file consistent such as 13724.wav. Other systems may accept certain data which can be inserted dynamically using the wildcards below. One possible use for these wildcards is persisting temperature and weather condition data through to RDS or other PAD endpoint.

@MM	Produces 2 digit Month. Example: 07
@DD	Produces 2 digit Day. Example: 04
@YY	Produces 2 digit Year. Example: 21
@нн	Produces 2 digit Hour. Example: 17
@mm	Produces 2 digit Minute. Example: 30
@ss	Produces 2 digit Second. Example: 14
[temp]	Produces an integer of the current temperature in the primary community. Example: 75
[wx]	Produces a string value of the current conditions in the primary community. Example: Cloudy
[advertID]	Passes the AdvertID of the sponsor used in the report (if applicable) for use when monitoring for impressions. Example: 97624
[rand]	Produces a pseudo-random integer. Length is only configurable using the

File Name Wildcards:



	settings file directly. Example: 64283265
[ext]	Passes the correct extension for the file (Wav). Example: wav

General Settings

Start on Windows Login - This setting utilizes the Windows registry to automatically start upon Windows login.

Minimize to Tray - This setting hides the Taskbar icon when ATMOS is minimized and instead shows the ATMOS icon in the Windows Tray. This helps prevent ATMOS from being closed inadvertently by a user and helps minimize the number of icons on the Taskbar.

Enable Debug Logging - Add verbose debugging statements to the log by setting this to true. This is mainly used by Summit Technology Group support technicians to identify and troubleshoot issues.

Normalize Audio - Set this to true to normalize the report audio in its final stage. Audio normalization is the application of a constant amount of gain to an audio recording to bring the amplitude to a target level. Because the same amount of gain is applied across the entire recording, the signal-to-noise ratio and relative dynamics are unchanged.

Two principal types of audio normalization exist. Peak normalization adjusts the recording based on the highest signal level present in the recording. Loudness normalization adjusts the recording based on perceived loudness.

AdvertID UDP Port - User defined port for incoming UDP strings from automation or PAD middleware used to increment the number of times a particular sponsor message has aired. For

information on configuring this setting, see the section titled <u>'Sponsor</u> Monitoring and Reconciliation'.

Country - The country in which this instance of ATMOS is being used.

Set Waveform Color - These two settings define the color of the background and foreground for the waveform used for emergency alerts. This is simply a color preference for the





operator and does not affect the behavior of ATMOS.

Script Selection Method

Pseudo-Random - A script template selection method that pseudo-randomly selects an ATMOS Script Template (.ast filename extension) from the available templates.

Programmatic - A script template selection method that selects an ATMOS Programmatic Script Template (.apst filename extension) based upon the Current Conditions in the Primary Location. Additional mappings for all weather conditions are made in the ATMOS configuration file.

Interval Settings

The interval settings allow the user to enable or disable the automated (timer-based) delivery. It also allows the user to specify the interval length. The interval can be

Interval Settings	
Enable automated delivery	(based on timer set below)
New report interval (minutes):	60

set to any number of minutes (minimum of 5 minutes). Automated delivery is recommended only if the user is not intending on using automation control to trigger new alerts (such as for time announcements). This setting can be remotely enabled and disabled using the commands described in the section titled 'Automation Control'.

EAS Unit Connection

This setting is used to set the connection to an EAS Encoder for purposes of issuing a Required Weekly Test (RWT) from ATMOS (or through the use of a UDP command issued from an automation system).

EAS Unit	Connection	
Address:	10.182.12.18	EAS Model: Sage ENDEC 3644 🗸
Reply:	5;14063	
	1	
		Ping EAS Unit Send RW1

The first step in configuring this connection is to specify the IP address of the EAS encoder. The IP Address shall be entered simply as nnn.nnn.nnn without any trailing characters for specifying the port. Next, specify the model of compatible EAS encoder with the 'EAS Model' dropdown. Finally, use the 'Ping EAS Unit' button to test the

connection to the EAS encoder. Most models of EAS units will return some acknowledgement in



the 'Reply' field. For more information on setting up the proper settings within your EAS device, refer to the ATMOS section of the knowledge base for a whitepaper that describes the process.

Finally, to test sending an RWT, click the 'Send RWT' button in the EAS Unit Connection settings. Information on issuing commands from automation to send an RWT can be found in the section titled <u>'Automation Control'</u>. Furthermore, manual commands can be sent using the 'EAS Alerting' menu from the main ATMOS window.

Regulatory Compliance Note:

§11.61(a) stipulates that 'Analog and digital AM, FM, and TV broadcast stations must conduct tests of the EAS header and EOM codes at least once a week at random days and times. The 'random' nature of such tests can be accomplished by allowing operators to issue commands in an ad-hoc fashion. RWTs shall not, for example, be scheduled on a recurring weekly basis on Tuesdays at 3:30 AM.

Personalization Settings

Script Settings

Replace AM/PM with Morning/Afternoon - Enable this setting to replace instances of 'AM' and 'PM' with 'Morning' and 'Afternoon' such as in 'PM Snow Shower'. This setting will also correct articles 'a' and 'an'. For example, in the case where the forecast calls for 'a chance of a PM shower' ATMOS will speak 'a chance of an afternoon shower'.

Daily temp range should conform to current temp - Enable this setting to artificially raise the current day's high temperature or lower the current day's low temperature based upon the current temperature. For example, enabling this setting will eliminate any instances where ATMOS would return a script that said, 'Today's high will be 74 degrees. Currently 76 downtown'.

Generalize Future Temps - For certain instances where a single location is used, a word (or string of words) can be used to replace the second temperature in an array of 2 or more temperatures. For example, if today and tomorrow will both be 59°, the script may read 'Tuesday's high will be 59 and *the same* on Wednesday'.

Call Sign Enumeration - For stations with call letters that resemble a word in the report language that chose to use said call letters in their script

Script Settings
Replace AM/PM with Moming/Afternoon
Daily temp range should conform to current temp
Generalize Future Temps
Call Sign Enumeration: WORK-AM



templates, Call Sign Enumeration can be used. This setting if enabled and call letters specified will ensure each letter is spoken independently of the others. For example, WORK or WHAM would be pronounced as call letters as opposed to the words 'work' and 'wham'.

Temperature Generalization

Temperature Generalization controls how the generalized temperatures are read. More information about the GenTemp[] AML tag can be found in the section titled '<u>Modifier Type AML</u> <u>Tags</u>'. The two possible options are 'Upper/Mid/Lower' and 'High/Mid/Low'.

Background Music Settings

Master Voice Settings

Voice Source - This setting allows the user to specify between the use of a cloud-based synthesized voice and a local-based SAPI-5 synthesized voice.

Reporter Voice - The specified voice of the weather report voice when using a cloud-based synthesized voice.

Sponsorship Voice - The specified voice of the national spot voice when using a cloud-based synthesized voice. This setting is currently only for barter tier clients that take traffic from Summit Technology Group.

Alternate Character - This setting alternates the character(s) after each report so as to mix up the voices from report to report. This only applies to instances where the voices selected are different.

Male Reporter Name - The name that is used to replace the '[CharacterName]' AML tag when the 'Reporter Voice' selected is a male or masculine voice.

Female Reporter Name - The name that is used to replace the '[CharacterName]' AML tag when the 'Reporter Voice' selected is a female or feminine voice.

Local Voice Settings

Voice Name - This dropdown enumerates all the available SAPI-5 voices installed on the computer and allows the user to set the desired voice to use if 'Voice Source' is set to 'Local Voice'.



Speaking Rate - A user defined rate of speech that ranges from -10 to +10. The default (normal speaking rate) is 0.

Name Settings

Nationality of Name - Used for the 'Random Name API' to generate a name of particular origin.

Script Editor

The script editor allows the user to create, load, and edit ATMOS Script Templates, ATMOS Programmatic Script Templates, and ATMOS Emergency Script Templates all from an integrated helpful editor.

To create a new ATMOS Script Template, simply select File>New. Set the name of the script template in the 'Standard Script Name'. Finally, use the script text box to write the script.

To edit an existing script, simply select File>Open... and select the file you wish to edit.

To create a new ATMOS Programmatic Script Template, simply select 'New Programmatic Script'. Ensure the box is checked to 'make the script programmatic'. Select the desired Weather Condition from the dropdown. This will load the current script if one is already available. Finally, use the script text box to write or edit the script.

In all cases, to save the edited script, simply select File>Save or use the keyboard shortcut Ctrl+S.

Printing a script template can be done by selecting File>Print.

The 'Insert' menu has many of the most common ATMOS Markup Language (AML) Tags that, when selected, will be inserted into the script template at the current cursor position. The next section details all the AML Tags that exist as well as an explanation of how to use each tag.

ATMOS Markup Language (AML) Tags

ATMOS Markup Language (AML) Tags are divided into two main groups and further subdivided by the number of 'dimensions' they can have. The two main groups are 'Data' and 'Modifiers'. Data types are replaced by dynamic data at runtime whereas Modifiers modify Data or other strings.



Most commonly, data will have 1 or 2 dimensions (often location and time). Thus, many AML Tags will have arguments such as {p, 0}. In most cases, Location comes first and Time (such as day) follows. Location arguments can be any index of a location in the Locations Manager, 'p' for the Primary Community, or 'r' for a globally random location index each time a report is run.

For example, the Location AML Tag can be written as [Location{2}], [Location{p}], or [Location{r}]. All will produce a specific result. In the below table, we will typically use $\{p\}$.

AML Tag	Explanation of Use
[Location{p}]	The name (or phonetics if present) for the given location {p}.
[ForecastHeadline{p, 0}]	A variable length forecast headline for the given location and period.
[ForecastName{p, 0}]	The name of a particular period for the associated ForecastHeadline. For example, 0 might indicate Today, 1 indicates Tonight, 2 indicates Tomorrow and 3 indicates Tomorrow Night. The location is needed because some NWS weather offices do not abide by this standard.
[CurrentTemp{p}]	Integer value of the current temperature for the given location.
[HiTemp{p, 0, i}]	Integer value of the expected high temperature for the given location on the specified day (index 0-4). The final argument is optional and indicates a specified unit of measure (i = imperial, m = metric).
[LoTemp{p, 0, i}]	Integer value of the expected low temperature for the given location on the specified day (index 0-4). The final argument is optional and indicates a specified unit of measure (i = imperial, m = metric).
[TempUnit]	The unit of measure used for the temperature given country settings.
[CurrentWindSpeed{p, i}]	Integer value representing the current wind speed in a given location in a specified unit of measure (i = imperial, m = metric).
[FutureWindSpeed{p, 1, i}]	Integer value representing the forecast wind speed in a given location for a specified day in a specified unit of measure (i = imperial, m = metric).

Data Type AML Tags:



[CurrentWindDirection{p}]	Directional value of the wind in the specified location at the present time. Example sentence: 'Winds are out of the [CurrentWindDirection{p}]'. Returns one of the 8 cardinal or intercardinal wind directions.
[FutureWindDirection{p, 1}]	Directional value of the wind in the specified location and the specified day. Example sentence: 'And on [Day{2}], winds will be out of the [CurrentWindDirection{p, 2}]'. Returns one of the 8 cardinal or intercardinal wind directions.
[Day{0}]	The name of the day of the week for the specified day (index 0-4). Returns a string value such as: 'Tuesday'. Can be modified to be made plural such as '[Day{1}]'s high will be'.
[FormalDate]	Returns a string such as 'Tuesday, December 8th' for the current date. Does not include the year (see [Year]).
[SlangDate]	Returns a string such as 'Tuesday, the 8th day of December' for the current date. Does not include the year (see [Year]).
[Year]	Returns the current year. For example, '2019'.
[Daypart{0}]	Returns the desired Daypart (morning, afternoon, evening) based on the optional argument acting as an increment or index from the current daypart.
[FormalTime{00:05, true}]	Returns a time such as '5:35 PM'. Can be incremented by a positive number of hours and minutes (first argument) and can include the time period (AM/PM) based upon the boolean argument.
[SlangTime{00:05}]	Returns a time such as '20 minutes to 2'. Can be incremented by a positive number of hours and minutes.
[CurrentWx{p}]	Returns the current conditions in the given location. Example: 'Cloudy' or 'Snow Showers'.
[Conditions{p, 1}]	Returns the forecast conditions in the given location for the given day. Example: 'Cloudy' or 'Snow Showers'.
[ObservationTime]	Returns the time the latest weather observations were made.
[CharacterName]	Returns the string value of the character name whose gender matches that of the report.
[Holiday]	If an enabled holiday falls on the day the report is being



	generated, the greeting set for that holiday will be returned. Otherwise, the NoHoliday greeting will be returned. For more information, refer to the section titled 'Holiday Manager'.
[Sponsor]	Pseudo-randomly returns an active (not expired) and eligible (considering day of week and daypart) sponsor message from the sponsor manager. Requires certain paid plans or add-on packages. Not available to barter tier users. For more information, refer to the section titled 'Sponsors Manager'.

Modifier Type AML Tags:

AML Tag	Explanation of Use
GenTemp[]	Generalizes to the tens place any integer it wraps (typically used for temperature). For example, considering an expected high temperature of 68 in 2 days, 'GenTemp[HiTemp{p, 2, i}]' would return 'Upper 60's' or 'High 60's'. This tag supports nesting (AML tags within AML Tags).
	[Day{2}]'s high is expected to be in the GenTemp[HiTemp{p, 2, i}].
RandPhrase()	Pseudo-randomly returns 1 of n arguments, delimited by vertical bars ' ' and wrapped in standard parentheses '(' and ')'. This tag supports nesting (AML tags within AML Tags).
	For example: RandPhrase(I'm [CharacterName], have a great day Enjoy the rest of your [Day{0}] Keep listening and have a great [Daypart])
[TempTrend{x, y}]	Returns a user-defined phrase to describe the trend in temperatures 'x' and 'y'. Phrases are based on user defined magnitudes and the increase or decrease of temperature. The variables 'x' and 'y' are typically AML tags such as '[HiTemp{p, 2, i}]' or [LoTemp{p, 3, i}].
	For example: [TempTrend{[HiTemp{p, 0, i}], [HiTemp{p, 1, i}]}]
Warmest()	Returns an integer value; the warmest temperature in the data set delimited by commas.
[Coming Soon]	For example:



	Warmest([HiTemp{p, 1, i}], [HiTemp{p, 2, i}], [HiTemp{p, 3, i}])
Coldest()	Returns an integer value; the coldest temperature in the data set
[Coming Soon]	
	For example:
	Coldest([LoTemp{p, 1, i}], [LoTemp{p, 2, i}], [LoTemp{p, 3, i}])
Average()	Returns an integer value; the average temperature in the data set delimited by commas.
Average() [Coming Soon]	Returns an integer value; the average temperature in the data set delimited by commas.
Average() [Coming Soon]	Returns an integer value; the average temperature in the data set delimited by commas. For example:
Average() [Coming Soon]	Returns an integer value; the average temperature in the data set delimited by commas. For example: Average([HiTemp{p, 1, i}], [HiTemp{p, 2, i}], [HiTemp{p, 3, i}]) Or

Modifier AML Tags in Depth

GenTemp[]

GenTemp[int] is able to generalize temperatures by speaking them as low, mid, or upper values. For example, the temperature 57 degrees would be read as 'upper 50's'.

The proper syntax for this tag is as follows:

GenTemp[HiTemp{p, 1, i}]

NOTE: This tag partially supports nesting (the inclusion of wildcards or AML tags within itself, limited here by the data type)

With additional context, this would produce: Tomorrow, expect temperatures in the 'upper 50's'.

RandPhrase ()

RandPhrase() is able to pseudo-randomly select one of a collection of possible phrases that would logically be placed at a given spot in a script. For example, it could pseudo-randomly decide on what forecast data to read or how to read the end of the report.

The proper syntax for this tag is as follows:



RandPhrase(<option1>|<option2>|<option3>|<optionN>)

NOTE: This tag fully supports nesting (the inclusion of wildcards or AML tags within itself)

A real life example would be:

RandPhrase(Today's high will be [HiTemp{p, 0}]|Expect temperatures as high as [HiTemp{p, 0, i}]|[HiTemp{p, 0, i}] is today's high)

OR

RandPhrase(Enjoy your [Daypart]|Have a great [Daypart]|Have a wonderful [Daypart]|Thank you for listening to WHAM The Pig)

[TempTrend{x, y}]

TempTrend returns a user-defined phrase to describe the trend in temperatures 'x' and 'y'. Phrases are based on user defined magnitudes and the increase or decrease of temperature and are set in the 'Temperature Trends' menu. The variables 'x' and 'y' are typically AML tags such as '[HiTemp{p, 2, i}]' or [LoTemp{p, 3, i}]. For more information, refer to the section titled Temperature Trends' under the 'ATMOS Settings Managers' section.

ATMOS Settings Managers

ATMOS utilizes a variety of tools called managers. Managers offer greater flexibility to the user than do menus when there are infinite configuration possibilities. To ensure reliability and data integrity, ATMOS managers each use their own database(s). The location of the database shall be the root of the application run directory.

For information about database design, our API, or custom development services to integrate ATMOS into other workflows, please contact Summit Technology Group at the contact information listed at the end of this manual.

Holiday Manager

The ATMOS Holiday Manager allows the user to specify which holidays they wish to announce using the 'Holiday' AML Tag. The manager lists 10 US Federal Holidays that are predictable based upon a calendar along with 'NoHoliday'. Each of these have an associated greeting. The greetings are accessible by right clicking on the holiday and selecting 'Edit Holiday Greeting' from the context menu.



Holidays		x
New YearsDay MartinLutherKingDay PresidentsDay MemorialDay IndemendenceDay Lab Enable Holiday Coli Disable Holiday Vetr Endit Holiday Greeting ChristmasDay NoHoliday	Holiday Greeting Independence Day y your backyard BBQs today as we celebrate America's Independence Save]
	Close	

Upon doing this, the greeting will appear in the 'Holiday Greeting' group box and be ready for the user to edit and save when finished. The holiday greetings can be nested, meaning they can contain other AML Tags within

them.

NoHoliday will always remain selected as it is not possible to disable that 'holiday'.

At runtime, if the day in which a report is run is not a holiday, the 'Holiday' AML Tag will return the

Current Report	
We wish you a meny Christmas and a wonderful New Year	\sim
Snow continuing through this evening with a storm total of 1-3 inches, currently 23 degrees in Detroit.	
Here is your ATMOS Weather Report for Friday the 25th day of December, I'm Erica Walters for ATMOS Weather on the 8's,	
Snow in Detroit, and good afternoon to listeners in Sterling Heights, currently Snow and 23 degree temps for you.	
Getting down to 20 overnight tonight, Saturday's high will be in the lower 30's, Windy with a snow shower. Temperatures in the lower 40's on Sunday.	
For ATMOS Weather, I'm Erica Walters, Thanks for listening.	\checkmark

greeting associated with 'NoHoliday', otherwise it will return the greeting associated with the holiday that falls on that day. Pictured above is an example of a report that ran on 12/25 (Christmas Day).

Locations Manager

The ATMOS Locations Manager is where the station's primary and secondary communities are set up. These locations serve as the basis for the weather reports by providing ATMOS with 'Location Name' and 'ZIP Code'. Setting up locations in the Location Manager can provide your forecasts with more specificity and even show smaller outlying communities that you care about providing them with the weather. Standard plans include between 3 and 5 licensed locations. More locations can be added with add-on packages to your subscription. To update your subscription, login to your client portal or contact Summit Technology Group for assistance.

One example is to cite a metropolitan area such as Detroit. An ATMOS report can make use of the 'Location' AML Tags as well as the associated 'CurrentTemp' and 'CurrentWx' tags to create a report that results in the following:



"68 degrees in Detroit currently under cloudy skies, 64 in Pontiac, and good morning to listeners in Royal Oak, 66 degree temps for you."

Adding a Location

To add a location to the Location Manager, start by entering the ZIP Code into the 'ZIP Code' field and search for the associated location. The 'Location Name' will be populated with the official name of the desired location.

Legacy versions of ATMOS also rely on 'LocID'. This LocID is a uniform address for a specific location used by ATMOS to pull the proper weather data.

Should a Location Name be mispronounced by the synthesized voice, the phonetics can be input in the 'Phonetics or Nickname' field. In addition, if a location should be addressed by a nickname, it can be input here as well. Examples include 'The Twin Cities', 'The Township', or 'The Motor City'. If the 'Phonetics or Nickname' field is empty, the 'Location Name' will be used to replace the 'Location' AML Tag when generating reports. Note that the text of the report will always use the 'Location Name' and the 'Phonetics' will only be used for the synthesized speech.

'Primary Community' denotes the community is the main location. This can be referenced in a script template with any AML Tags that support the '{p}' argument. This also sets the current conditions and temperature in the filename of the file for persisting data through to an RDS or other PAD endpoints. There is a limit of 1 primary community in the database.

Updating a Location

To update a location in the Location Manager, simply double click the row of the location you wish to edit. This will populate the 'Location Data' and allow you to make the necessary changes. To change the 'Location Name', you may need to click the search button to reinitialize the search results as these are not cached or stored in the database.

Removing a Location

To remove a location from the Location Manager, simply click the row

header to the left of the location you wish to remove and press the 'Delete' key. You will be prompted with a message box confirming deletion. This action cannot be undone.





Sponsor Manager

The ATMOS Sponsor Manager allows users on select paid plans to monetize their weather report. In doing so, a station would sell weather sponsorships and include the sponsor's message in the database. Each message can be set to play only during specific days of the week or dayparts. An expiration date can be used to expire a sponsor message. The 'Sponsor' AML Tag will be replaced at random with an eligible message each time a report is run.

After adding, updating, or deleting a sponsor message, select File>Save Changes to commit the changes to the database.

The File menu also allows the user to access the print dialog and various export functionalities to use the data for traffic and billing purposes.

The 'Default Sponsor Message' is used in place of any specific sponsor message if not eligible messages are active at the time of the report running. This default message may be left blank or serve as a sort of promotional message to encourage other advertisers to sponsor the weather on your station. To edit the 'Default Sponsor Message', simply click Tools>Default Sponsor Message. Make the desired changes to the message and click 'Save'.

The 'Reports' field in the database keeps track of the number of reports the sponsor message is included in whereas the 'Impressions' field reflects the number of times your automation system played the sponsor message as a part of the report. An explanation of how to set this up can be found in the section titled <u>'Sponsor Monitoring and Reconciliation'</u>.

Adding a Sponsor Message

To add a sponsor message, simply click File>New Sponsor Message or use the shortcut keys Ctrl+N. Next specify the name of the sponsor and the sponsor message in the text boxes provided.

The sponsor message may be similar to, "This ATMOS Weather Report is being brought to you by Bill Wheeler Automotive, for the best cars at the lowest price, call Bill Wheeler today at 1 (844) WHEELER..."

To activate the message immediately, ensure the 'Active' checkbox is checked. If you wish to activate the message at a later time, the check box can be unchecked. The 'Active' checkbox is checked by default.



The 'Scheduling Options' group box allows the user to specify which days of the week and day parts the sponsor message may air. The 'Expiration' allows the user to expire the message at a certain date. This is helpful for dealing with fixed time flights or where the message promotes an event or time-sensitive promotion.

Below is a chart of the various dayparts and the times of day they correspond to:

Daypart	Times of Day (24-Hour Format)
Morning Drive	06:00 - 10:00
Mid-Day	10:00 - 15:00
Afternoon Drive	15:00 - 19:00
Evening	19:00 - 00:00
Overnight	00:00 - 06:00

Updating a Sponsor Message

To update a sponsor message in the Sponsor Manager, simply click the row header to the left of the location you wish to edit. Then click File>Update Sponsor Message or use the shortcut keys Ctrl+U. Follow the same procedures as adding the sponsor message and click 'Update'.

Removing a Sponsor Message

To remove a sponsor message from the Sponsor Manager, simply click the row header to the left of the location you wish to edit. Then click File>Delete Sponsor Message or use the shortcut key Del. You will be prompted with a message box confirming deletion. This action cannot be undone.

Sponsor Monitoring and Reconciliation

ATMOS has the ability to monitor metadata coming from your automation system to determine how many times a particular sponsor message plays. For example, if a station schedules a report to play 6 times an hour, the sponsor in that report would get 6 impressions (one impression for each time it aired). If, on the other hand, the report gets updated and pulls a sponsor message but the report is not played at all that hour, the sponsor message would accrue 0 impressions.

Setting up the sponsor monitoring and reconciliation feature varies between automation systems but below is a general guide on how the configuration should be done.



Include '[advertID]' in the Filename

Add the '[advertID]' AML Tag to the filename in General Settings. At the time a report is generated, the

File Name: @MM@DD@YY@HH@mm_[temp]_[wx]_[advertID].wav

'[advertID]' AML Tag will be replaced with the 5 digit numerical AdvertiserID in the Sponsor Manager. Nothing will prepend or append this 5 digit number.

Configure your Ingest Middleware

The next step is to configure the ingest middleware used to ingest ATMOS audio files into automation for playout. In most cases, ingest middleware will allow the user to configure what is referred to as a filename parse. This technique allows the middleware to capture metadata for the audio file based on the filename and the data separated by delimiters. The underscore ('_') is a common delimiter used for this purpose.

While it is up to the user to decide which library field will ultimately store the 'advertID', we recommend it be a field that is seldom used and will not cause issues with other traffic, newsroom, or playout functionality. The middleware should be configured to overwrite the value each time a new file is ingested as the file will likely have a different 'advertID' than the report before it.

Configure your PAD Output

The next step is to ensure the 'advertID' metadata stored in the library database is sent back to ATMOS on the UDP port specified in General Settings. The playout software shall be configured to send a string via UDP to the instance of ATMOS that resembles the following:

advertID=42839

In the automation system configuration, there will likely be a tag that corresponds to a field in the library such as [TITLE] and [ARTIST]. Use the tag that corresponds to the field responsible for storing the 'advertID'. The string 'advertID=' shall be literal text prepended to the 'advertID'.

The string may contain other characters but should at a minimum contain the above string. This will be interpreted by ATMOS and added to the Sponsor Manager database.

Changing the UDP Port

To specify a different UDP port on which to monitor for incoming PAD data, see the section titled <u>'General Settings'</u>. A restart of ATMOS is required after making this change.



Background Music Manager

The Background Music Manager provides access to the ATMOS Background Music Marketplace, a free online marketplace of beds for your weather reports. The Background Music Manager allows the user to browse through the various royalty-free beds available for use and add them to the user's library. Each time a report is run, a bed will be pseudo-randomly selected from the user's library for use in the report.

Select background music from a variety of 'Formats' listed on the left hand pane of the Background Music Manager. Upon clicking into a particular format, the 'Available Beds' will populate the upper list box. Selecting a bed and clicking 'Add' will add that bed to the user's library and be available for use in the next report. To remove a bed from the library, simply click the bed from the lower list box and click 'Remove'. In each case, clicking 'Save' will save any changes.

Importing a Custom Background Music Bed

To import a custom background music bed, simply launch the 'Background Music Manager' from the 'Main Menu' and then click Music Menu>Music Importer. This will bring up the Background Audio Importer tool. From here, simply use the 'Browse...' button and select a wav audio file. Set the 'Name' and 'Artist' of the audio file and click 'Import'. Once the file is imported, you can close the Background Audio Importer tool.

Temperature Trends

The Temperature Trends menu allows users to set the phrases for various temperature trend situations. Temperatures can be described by two characteristics, magnitude and direction. ATMOS allows a user to set the parameters that define the magnitudes (same, mildly, standard, and greatly). Direction can either be warming or cooling. The phrases set in this

Temperature	Trend	ls				
Phrases					Cooling	Warming
Same:	0	×	2	*	with temperatures staying	with temperatures staying
Mildly:	3	-	5	* *	with temperatures cooling	with temperatures warmin
Standard:	6	•	10	* *	with temperatures droppin	with temperatures rising q
Greatly: diff	erentia	al above	10 d	egrees	with temperatures droppin	with temperatures rising si
						Save

manager can contain nested AML tags. For example, if the [TempTrend $\{x, y\}$] tag is used and the first value is 58 and the second value is 42, the trend would be said to be 'cooling greatly'.



The returned phrase could be something like: 'with temperatures dropping significantly to [HiTemp{p, 1, i}]'.

Automation Control

ATMOS can be controlled over a Local Area Network (LAN) by passing UDP strings from an automation or playout system to ATMOS on the automation control port. These are often used to control ATMOS functions and behavior as well as trigger new reports at certain times of the day. The control port is, by default, set to UDP 5009. Below are the various UDP commands that you can use to trigger functions in ATMOS:

Command	Explanation
GENERATE REPORT	Used to generate a new report.
EAS RWT	Used to issue an RWT to a connected EAS Encoder.
EAS PING	Used to ping a connected EAS Encoder.
EAS POLL	Used poll a connected EAS Encoder.
ENABLE AUTOMATED	Used to enable automated delivery of weather reports.
DISABLE AUTOMATED	Used to disable automated delivery of weather reports.
DOWNLOAD SPONSORS	Used to download new sponsors on demand (barter tier).
PLAY REPORT	Used to play the EAS alert or enabled routine report.
STOP REPORT	Used to stop the EAS alert or enabled routine report.
UNLOAD REPORT	Used to unload the EAS alert or enabled routine report.
TOGGLE SCRIPTING METHOD	Used to toggle between scripting methods.
EXIT	Used to exit ATMOS without prompting for confirmation.

Licensing and Support

ATMOS is licensed on a hybrid cloud and local model meaning the license data (number of daily reports, remaining reports, and various keyed features) are stored in the cloud. To sign up for ATMOS obtain and а login credential, simply sign online up at https://www.summittechgroup.com/atmos-plans#Subscription-Plans or contact Summit Technology Group sales.



Once a user has signed up for an ATMOS account, they will receive an email with a link to the latest installer, the email address they used to register for the account and the subscription ID (starts with 'SUB-'). After installing

ATMOS, the licensing process is very simple. Launch ATMOS and click 'Login' in the upper right hand corner of the main window. Then click the link for 'First time logging in?'. The password reset window will appear and ask for your email address and subscription ID. After clicking 'Verify

Login					
	Email:				
	Password:				
		🗹 Auto-l	Login on Startup		
		Logir	n Cancel		
		First time I	ogging in? Click here.	•	
s is very	Step 1	: Verify Lice	ense		
d corner		Email:	noreply@domain.com	n	
the link	Subsc	ription ID:	SUB-283029		
?'. The			Verify License		

License', ATMOS will verify the information you supplied in those two fields. If the subscription is valid and the password has not yet been set, ATMOS will prompt you to set and confirm a new password. We recommend using something that everyone in your organization would know as opposed to a personal password. After the password has been set, ATMOS will prompt you to return to the login window and use the email address and newly set password to login.

Once logged in, you will be able to view details about your license as well as set whether or not ATMOS should auto login to the account on application restart. This is highly recommended for automated setups where a user would not be present to login. Details about your license include if you are licensed for multi language support, sponsorship manager support, IPAWS integration support, EAS RWT integration support, number of licensed locations, number of reports per day, and your account ID (call sign).

For convenience, the last line of the license details includes a statement as to whether or not ATMOS is licensed to the current device.

Password resets can only be initiated by Summit Technology Group support. To have your password reset, please send an email indicating such to <u>licensing@summittechgroup.com</u> from the email address on file and include your subscription ID.



Upgrading to the Latest Version

From time to time, it may be necessary to upgrade to the latest version of ATMOS. All licensed users (those with an active paid subscription or an active barter agreement on file) are entitled to free upgrades of ATMOS. To update to the latest version, simply click Help>Upgrade to Latest Version. After prompting the user to proceed, ATMOS will download the latest installer and run the installer silently in the background. ATMOS will restart when the installer is complete.

ATMOS About Window

The ATMOS About window presents information about what version of ATMOS is running as well as provides legal information about the various trademarks, copyrights, libraries, components, APIs, and fonts used in ATMOS. When communicating with Summit Technology Group technical support, the version number is important to know.

ATMOS User Forums

Users seeking to learn more about their ATMOS system are encouraged to join and participate in discussions on the ATMOS Product Forum (available from our website: <u>www.summittechgroup.com</u>). The forum is the ideal venue for collaborating on script ideas and AML Tag usage, submitting feature requests, or requesting general assistance that may be helpful to others. The forum is not an ideal venue for licensing, pricing, or specific technical support inquiries. For specific technical support or assistance as it relates to your license, please see the section titled <u>'Seeking Technical Support'</u>.

Seeking Technical Support

For technical support questions or assistance, please contact Summit Technology Group technical support by submitting a ticket via our website (<u>www.summittechgroup.com/support</u>) or email <u>support@summittechgroup.com</u>. Users with a Gold Plan, Commercial Barter Plan, or a Technical Support add-on may call us at (248) 706-6963 and select option 2 for product support.

Managing My Subscription

To manage your ATMOS subscription, simply navigate to the 'Client Portal' on our website (<u>www.summittechgroup.com</u>) and select 'Online Payment Portal'. Here you will be able to make changes to a subscription, view, approve, and pay quotes and invoices, and even track engineering projects (if applicable to your account). Credit card and bank account details can be securely edited from this portal.



Concluding Thoughts

It is with great pride and pleasure our development and support teams work to provide you with a comprehensive solution to automated weather reporting. We look forward to building a lasting relationship with you, your station, and your team and look forward to assisting any future broadcast challenges. We further hope that you pass along our name to colleagues and evangelize our product if you feel it deserves praise. Finally, if any portion of this product can be made better, we encourage you to let us know. The forum is typically the best venue for these types of feature requests but we are always open to hearing from you directly.

Thank you, Paul Stewart President, Summit Technology Group



Appendix A: Configuring ATMOS for Various Automation Systems

Station Playlist

The following aims to provide the steps needed to configure ATMOS to Station Playlist automation software.



Open StationPlaylist Creator, and left-click within the window.

New Category × Category Name Weather ок 😹 StationPlaylis X Notes File Edit Viev Cancel -Files or Folders New C:\ATMOS Add Files Add Folder 0 Catego Total Create 'New' category Clear All 0 Spot Gr 0 Average Time 00:00:00 Include subfolders File Count 0 Л, Track Criteria 'Weather', with path of Recycle Automatic Reshuffle Reshuffle Now O Rotatio Category Type Nest Normal OBlock O Single Attempt Schedu Playlist Text Color Enabled Rules Related A Default Playlist Text Color Genre O Specify -----> Related 8-8-8-8-Mood Tempo Options Song Separation Default O Specify -----> Gene Energy Decade Separation Vear Gender Artist Separation Playlist F Default O Specify -----> Advan Language Daypart HTML / Hourpart Title Separation Default O Specify -----> 0 0 total Category tra Album Separation Default O Specify -----> 0 Help

C:\ATMOS\

Save Changes



Ne	w Open Sav	re Save All Print	Play Track Tool Create Editor		
			Categories		
	Categories Spot Groups Track List Rotations Schedules Related Artists Related Titles - Options General Separation Rules Playlist Format Advanced HTML / VT	Category Name Music Weather	Folder(s) and File(s) C:\Users\user\Music\SPL C:\ATMOS;	Next Item	Total 0 0
) tota	Category tracks	0 unique Artists			

Configure ATMOS to output to 'C:\ATMOS\WEATHER.wav'.

lain Menu Help			
Next Report	Current Report		
11:01:06			^
Generate New Report			
5 Remaining Manual Reports			Ŷ
	General Settings		
11	New report interval (minutes): 60 🔄 🗹 Enable automated delivery		
	ZIP Code: 48320 Locid: Locid: Locid: Locid: Me		
ATMOS	Start on Windows Loain	i.	
BY SUMMIT TECHNOLOGY GROUP	Minimize to Tray		
	Enable Debug Logging		
owarad by	Script Selection Method	Save	2

Schedule/play "WEATHER.wav" as you would any other audio element in StationPlaylist Creator/Studio.



ENCO DAD

The following aims to provide the steps needed to configure ATMOS to the ENCO DAD automation software.



Appendix B: Script Editing In Depth

Opening Script Editor

Top left corner of the ATMOS panel is the *Main Menu* option. This menu has the option *Script Editor.*

1ain Menu Help			
Generate New Report	rent Report		
Download New Sponsors			^
Script Editor			
Background Audio Editor			
Personalization			
Holiday Manager			
Print Current Report			
Save Current Settings			V
5.	neral Settings		

Script Editor	
File Edit Insert	
Make this script programatic Standard Script Name: Default	New Programmatic Script
[ForecastHeadline] currently [CurrentTemp] degrees at Summit Te	chnology Group Radio Studios.
Here is your ATMOS Weather Report for [Day{0}] [SlangDate], I'r	n [CharacterName] for ATMOS Weather on the 8's,
[CurrentWx] in Keego Harbor and Sylvan Lake, currently [Current	Temp] degrees [TempUnit],
Getting down to [LoTemp{0}] overnight tonight, [Day{1}]'s high with $\{2\}$ on [Day{2}].	II be in the GenTemp[HiTemp{1}] and [Conditions{1}] and [Conditions{2}] and GenTemp[HiTemp $[HiTemp]$
For ATMOS Weather, I'm [CharacterName], RandPhrase(have a	great [Daypart]have a wonderful [Daypart]Thanks for listening).

After opening this panel, click *FILE, OPEN,* click the *default* script for now. More scripts can be added later.

At the top of the editor, use *Insert* to add customizations such as *Current Temperature, High Temperature, Character Name, etc.*



Programmatic Scripts:

Programmatic scripts are scripts that will be selected based on the current weather conditions. Programmatic script files end in **.apst (ATMOS Programmatic Script Template).** For example, if the weather report specifies the current conditions in the primary community is *Cloudy,* then the *cloudy script* will be used to create the report. *Examples are shown below.*



Script Editor	To see Programmatic Scripts. check the box
Mak his script programatic Cloudy Standar Script Name: Here is your ATMOS Weather Report for [Day{0}] [SlangDate], I'm [CharacterName] for ATMOS Weather on the 8's,	that is highlighted on the image to the left.
Cloudy today in Keego Harbor and Sylvan Lake, currently [CurrentTemp] degrees [TempUnit]. Let's hope the skies clear up soon. Getting down to [LoTemp{0}] overnight tonight, [Day{1}]'s high will be [HiTemp{1}] and [Conditions{1}] and [Conditions{2}] and [HiTemp{2}] on [Day{2}]. For ATMOS Weather, I'm [CharacterName].	Here is the cloudy script in the script editor.
Current Report Here is your ATMOS Weather Report for Friday the 5th day of June, I'm Charles Dixon for ATMOS Weather on the 8's, Cloudy today in Keego Harbor and Sylvan Lake, currently 76 degrees Fahrenheit. Let's hope the skies clear up soon. Getting down to 59 overnight tonight, Saturday's high will be 77 and Mostly sunny and less humid and Mostly sunny and 73 on Sunday. For ATMOS Weather, I'm Charles Dixon.	e 'cloudy' script being ayed in the current report.

Setting up Programmatic Scripts:

The highlighted portion shows the 'Script Selection Method', which has to have 'Programmatic' selected for programmatic operation. Then click SAVE.



To EDIT or CREATE a programmatic script:

Script Editor	
File Edit Insert	
Make this script programatic Standard Script Name:	~

In the script editor, select 'make this script programmatic'.



You can then create a new script, or open one that is already available and customize it. For example:

cript Editor		
File Edit Insert		
☑ Make this script program Standard Script Name:	atic Sunny Cloudy Overcast Fog Showers Thunderstorms Rain Ruinies Snow Ice Sleet Freezing_Rain Rain_and_Snow Hot Cold Windy Clear	~

Pictured are the options of Programmatic Scripts and possible weather conditions that ATMOS will report.

Here is the *SUNNY* script open in Script Editor:

You can customize this script by using the INSERT tab at the top of the screen.

NOTE: when the report is SUNNY, this script will become the current report.



Adding New APST Scripts:

The next steps go over how to create a new APST file and how to correctly map the file to the correct condition it falls under.

First Step: Creating the new APST File

Script Editor			
rine dit Insert			
Mak this script programa	atic	~	New Programmatic Script
Script Name:			

In the script editor, select the box highlighted, then select 'New Programmatic Script'.



NOTE: To find where your scripts are later, follow this path.

C:/ProgramData/Summit Technology Group/ATMOS/Scripts

After you have selected 'New Programmatic Script', create the name of the script and click 'OK'.

New Programmatic Script	×
Enter the name of the new ATMOS Programmatic Script Template.	OK Cancel
Weather_Condition	

NOTE: The file should always have an underscore between each word (if multiple words)

Script Editor		
File Edit Insert		
Make this script programatic	~	New Programmatic Script
Standard Script Name:	Clear	
	Cold	
	Flurries	
	Fog	
	Freezing_Rain	
	Hazy	
	Hot	
	lice Overnant	
	Rain	
	Rain and Snow	
	Rain_Rain	
	Showers	
	Sleet	
	Snow	
	Thunderstorms	
	Weather Condition	
1	144.1	

To open your new script. Select the dropdown menu, and find the new script name. In this example, 'Weather_Conditions' is the new script.

Select it, then begin typing in the box below. Here is where you will create the script.

Second Step: Mapping the APST File

On the ATMOS icon on the desktop, right click, and select *Open File Location*



OR

By following this path, you can get to the same location. C:/ProgramData/Summit Technology Group/ATMOS



Open this file with Notepad AutoWeatherAnnouncer.exe.config

ard	to • to • • • Organize	Tolder	Open	istory			
This PC → Local Dis	sk (C:) > ProgramData > Su	ummit Technology Group >	ATMOS				
^ Name	^	Date modified	Туре	Size			
Backgrour	nd Music	5/21/2020 5:12 PM	File folder				
Logs		6/15/2020 11:42 AM	File folder				
Plugins		5/19/2020 9:01 PM	File folder				
Scripts		6/15/2020 11:44 AM	File folder				
Setup		5/21/2020 5:12 PM	File folder				
Sponsors		5/19/2020 9:01 PM	File folder				
Support		5/21/2020 5:12 PM	File folder				
Weather		6/5/2020 10:31 AM	File folder				
🔛 AtmosLog	o.ico	4/12/2020 6:56 PM	lcon				
🔚 AutoWeat	herAnnouncer.exe	4/23/2020 4:07 PM	Application				
AutoWeat	herAnnouncer.exe.config	4/20/2020 6:25 PM	XML Configuratio	Ν	IOTE: if thi	is file does n	ot appear,
AutoWeat	herAnnouncer.pdb	4/23/2020 4:07 PM	PDB File	r	lease refe	r to Viewina	Hidden
AWSSDK.C	ore.dll	4/12/2020 6:56 PM	Application exten	۲ ح		i to viewing	maach
AWSSDK.C	ore.pdb	4/12/2020 6:56 PM	PDB File	F	lies white	paper.	
AWSSDK.C	ore.xml	4/12/2020 6:56 PM	XML Document				
AWSSDK.P	olly.dll	4/12/2020 6:56 PM	Application exten				
V AWSSDK.P	olly.pdb	4/12/2020 6:56 PM	PDB File				

acted 30.1 KR

In Notepad, look for

<AutoWeatherAnnouncer.Properties.Conditions>

This file is where all the weather conditions are listed and mapped.

In the example the the left, here is how this would work:

When the weather conditions are any of the following,

- "Sunny"
- "Mostly sunny"
- "Partly sunny:"
- "Intermittent clouds"
- "Hazy sunshine"

The **Sunny** APST file is then used as the current weather report.



Now knowing that, let's map your new APST script.

Here is an example of one that you might create:

Let's say the new APST file is called **Heavy_Rain.apst** This new file is going to have to be mapped to the RAIN condition.

The Notepad file would look like this before the change,

<setting name="rain" serializeAs="String"> <value>Rain</value>

And would end up looking like this because of the new APST file title.

<setting name="heavy_rain" serializeAs="String"> <value>Rain</value>